



Independent Environmental Audit 2020

Tarrawonga Coal Mine

7 September 2020

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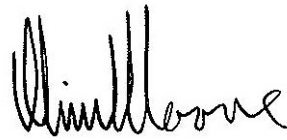
7 September 2020

Independent Environmental Audit 2020

Tarrawonga Coal Mine



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Independent Audit Certification Form

Independent Audit Certification Form	
Development Name	Tarrawonga Coal Mine
Development Consent No.	PA 11_0047 (Modification 8)
Description of Development	Tarrawonga Coal Mine is an open cut mine
Development Address	469 Goonbri Road, Boggabri NSW 2382
Operator	Tarrawonga Coal Pty Ltd
Operator Address	469 Goonbri Road, Boggabri NSW 2382
Independent Audit	
Title of Audit	Tarrawonga Coal Mine Independent Environmental Audit 2020
<p><i>I certify that I have undertaken the independent audit and prepared the contents of the attached independent audit report and to the best of my knowledge:</i></p> <ul style="list-style-type: none"><i>The audit has been undertaken in accordance with relevant approval condition(s) and in accordance with the auditing standard AS/NZS ISO 19011:2018 and Post Approval Requirements – Independent Audits</i><i>The findings of the audit are reported truthfully, accurately and completely;</i><i>I have exercised due diligence and professional judgement in conducting the audit;</i><i>I have acted professionally, in an unbiased manner and did not allow undue influence to limit or over-ride objectivity in conducting the audit;</i><i>I am not related to any owner or operator of the development as an employer, business partner, employee, sharing a common employer, having a contractual arrangement outside the audit, spouse, partner, sibling, parent, or child;</i><i>I do not have any pecuniary interest in the audited development, including where there is a reasonable likelihood or expectation of financial gain or loss to me or to a person to whom I am closely related (i.e. immediate family);</i><i>Neither I nor my employer have provided consultancy services for the audited development that were subject to this audit except as otherwise declared to the lead regulator prior to the audit; and</i><i>I have not accepted, nor intend to accept any inducement, commission, gift or any other benefit (apart from fair payment) from any owner or operator of the development, their employees or any interested party. I have not knowingly allowed, nor intend to allow my colleagues to do so.</i> <p>Note.</p> <p>a) <i>The Independent Audit is an 'environmental audit' for the purposes of section 122B(2) of the Environmental Planning and Assessment Act 1979. Section 122E provides that a person must not include false or misleading information (or provide information for inclusion in) an audit report produced to the Minister in connection with an environmental audit if the person knows that the information is false or misleading in a material respect. The maximum penalty is, in the case of a corporation, \$1 million and for an individual, \$250,000.</i></p> <p>b) <i>The Crimes Act 1900 contains other offences relating to false and misleading information: section 192G (Intention to defraud by false or misleading statement—maximum penalty 5 years imprisonment); sections 307A, 307B and 307C (False or misleading applications/information/documents—maximum penalty 2 years imprisonment or \$22,000, or both).</i></p>	
Signature	
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EXECUTIVE SUMMARY

Environmental Resources Management Australia Pty Ltd (ERM) was commissioned to perform an Independent Environmental Audit (IEA) of the Tarrawonga Coal Mine ('TCM') on behalf of Whitehaven Coal Limited ('WHC'). The mine is located approximately 16 km east of Boggabri, 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 11_0047, which requires completion of an independent audit every three years from the date of the approval. The audit period assessed in this IEA is 1 August 2017 through 30 July 2020 (the date the site visit was completed as part of the audit).

The audit included a review of:

- DPIE, Ministers Conditions of Approval PA 11_0047 (Modification 8) including Statements of Commitments;
- Mining Leases 1579, 1693, 1685 and 1749;
- Environment Protection Licence (EPL) 12365; and
- Implementation of Management Plans developed as part of the Ministers' Conditions of Approval.

Whitehaven Coal has established the control systems generally required for the stage of development i.e. operational. All staff interviewed demonstrated a high level of 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 "Post Approval Requirements – Independent Audit" issued May 2020. The number of non-conformances with the statutory conditions and implementation of the management plans is summarised in *Table E.1* below.

Table E.1 Summary of Audit Findings

Review	Non-compliances (NC)	Observations (Obs NC)	Observations (Obs C)
Statutory Instruments	7 (+4 duplicate)	-	3 (+1 duplicate)
Implementation of Plans	-	-	-

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 Tarrawonga Coal Mine ('TCM'), on behalf of Whitehaven Coal Limited (herein referred to as 'WHC'). The mine is located approximately 16 km north east of Boggabri, New South Wales (NSW). The primary purpose of the audit was to satisfy the Department of Planning, Industry and Environment (DPIE)¹ Ministers' Conditions of Approval (CoA) Project Approval number PA 11_0047 (Modification 8), which requires completion of an independent audit every three years from the date of the approval. The audit period assessed in this IEA is 1 August 2017 through to 30 July 2020 (the date the site visit was completed as part of the audit). The audit must:

- be conducted by suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Secretary;
- include consultation with the relevant agencies;
- assess the environmental performance of the project and assess whether it is complying with the relevant requirements of this approval and any relevant mining lease or EPL (including any strategy, plan or program required under these approvals);
- review the adequacy of strategies, plans or programs required under these approvals; and, if appropriate; and
- 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 Tarrawonga Coal Mine is open cut coal mine which was originally approved by the Minister for Planning under Project Approval PA 11_0047 on 22 January 2013 to Tarrawonga Coal Pty Ltd (TCPL). PA 11_0047 MOD 8 was approved in June 2020 with an expiry date of 31 December 2030.

The Tarrawonga Coal Mine lies within the mining leases (ML) 1579, 1685, 1693 and 1749. Tarrawonga is wholly owned by Whitehaven Coal Limited (WCL). The site holds Environmental Protection Licence (EPL) 12365, which was last varied on in January 2020.

1.1.1 Description of primary processes undertaken during the audit period

Current activities at the site include the following:

- Construction;
- Exploration;
- Land Preparation;
- Mining Operations;
- Coal Processing and Transport;
- Maintenance Activities;
- Waste Management;
- Water Management; and
- Rehabilitation.

¹ Formerly the Department of Planning and Environment (DP&E).

1.1.1.1 Construction and demolition

The following construction activities were conducted during the audit period:

- Construction of a new maintenance workshop and supporting infrastructure including fuel farm, oil and coolant storage and heavy vehicle wash bay.

No demolition was completed during the audit period.

1.1.1.2 Exploration

Exploration drilling was conducted during the audit period as required under the Mining Leases 1579, 1685, 1693, 1749 and for coal quality, geotechnical and/or hydrogeological evaluation purposes.

1.1.1.3 Land preparation

During the audit period, clearing of vegetation was conducted to mining operations. Prior to the commencement of any clearing activities, flora and fauna pre-clearing surveys are conducted in accordance with the Biodiversity Management Plan. Once cleared, soil stripping and stockpiling is conducted in the cleared areas in order to facilitate required works. Clearing is conducted during the annual twelve week clearing window from February to April.

1.1.1.4 Mining operations

TCM is approved to extract 3M tonnes of ROM coal per annum. During the audit period coal extraction has not exceeded 2.75M tonnes.

- 2017 1.87 Mt
- 2018 2.75 Mt
- 2019 2.26 Mt
- 2020 YTD 2.357 Mt

Open cut mining activities, including processing of coal, generally occur between the hours of 6:30 am and 5:00 pm (day shift) and 4:30 pm and 3:00 am (night shift) from Monday to Friday.

1.1.1.5 Coal processing and transport

ROM coal is transferred by road to Whitehaven's Coal Handling and Preparation Plant (CHPP) at Gunnedah. During the audit period TCM has transported a maximum of 2.54M tonnes to the CHPP (2017). TCM also transport coal by road directly to the market which accounted for a maximum of 105,907 tonnes in 2019.

Table 1.1 Coal Transport

	CHPP	Direct distribution
2017	2.54 Mt	69,252 t
2018	2.3 Mt	62,722 t
2019	2.24 Mt	105,907 t
2020	2.29 Mt	40,415 t

1.1.1.6 Maintenance activities

Maintenance of plant and equipment occurs within the maintenance workshop which is utilised and managed by TCM maintenance staff and contractors. A new workshop has been constructed in 2020 which includes a new bunded fuel farm, bunded oil and coolant tanks and heavy vehicle wash bay

with oil water separator. All bulk tanks are fitted with high level alarm. Oils are piped from the tanks directly to the workshop via overland pipes.

1.1.1.7 Waste management

Wastes generated at the Site include:

- General waste;
- Tyres;
- Batteries;
- Waste oil and filters;
- Hydraulic hoses;
- Coolant
- Scrap metal;
- Cardboard;
- Timber;
- Septic waste; and
- Paper, plastic, aluminium cans etc.

All wastes are collected by Namoi Waste for off-site disposal. Waste segregation was noted to be good during the audit.

Coal rejects received from the CHPP and waste overburden are disposed to the pit.

1.1.1.8 Water management

Water management at TCM is undertaken in accordance with the approved Water Management Plan. The main components of water-related infrastructure include:

- sediment dams to capture sediment in sediment-laden runoff from emplacement areas;
- surface water drains to divert sediment-laden runoff from emplacement areas to sediment dams;
- surface water drains to divert runoff from undisturbed catchments around areas disturbed by mining; and
- a mine water system to store water pumped out of the mine pit area and to collect runoff from coal stockpile areas.

1.1.1.9 Rehabilitation

Progressive rehabilitation activities have occurred during the audit period and generally comprise planting and maintenance of woodland areas.

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 or Mining Leases (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 DP&E'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 Tarrawonga Coal 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), Narrabri Shire Council (NSC) Gunnedah Shire Council (GSC) and Tarrawonga 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 August 2017 to 30 July 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 11_0047 (Modification 8) including Statements of Commitments;

- Mining Leases 1579, 1693, 1685 and 1749;
- EPL 12365; and
- Implementation of approved Management Plans:
 - Noise Management Plan, dated December 2014
 - Air Quality and Greenhouse Gas Management Plan, dated January 2015
 - Aboriginal Heritage Conservation Strategy, dated September 2017
 - Biodiversity Management Plan, dated April 2015
 - Water Management Plan, dated March 2020
 - Mine Site Rehabilitation Plan, dated March 2020
 - Environmental Management Strategy, dated May 2018
 - Blast Management Plan, dated December 2014
 - Heritage Management Plan, dated January 2014
 - Traffic Management Plan, dated May 2016

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 29 to 30 July 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 10 July 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 29 July 2020 at site to confirm the audit objectives and scope for the site inspection. Attendees included:
 - Heather McKay (ERM Lead Auditor)
 - Brigitte Healey (ERM Support Auditor)
 - Sebastien Moreno (Site Environment Superintendent)
 - Lynden Cini (Group Superintendent – Environment)
 - Tony Dwyer (Group Manager – Environment and Approvals)
 - Tian Oosthuizen (Engineering Manager)
 - Madeleine Wright (Environment Graduate)
 - Troy Brinkley (Workshop Supervisor)
- Site inspections were undertaken between 29 and 30 July 2020;
- A debrief / closeout meeting was held at the site on 30 July 2020 to discuss initial findings and recommendations. Attendees were:
 - Heather McKay (ERM Lead Auditor)
 - Brigitte Healey (ERM Support Auditor)
 - Sebastien Moreno (Site Environment Superintendent)
 - Lynden Cini (Group Superintendent – Environment)
 - Tian Oosthuizen (Engineering Manager)
 - John Hamson (Operations Manager)
- 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 Gunnedah and Narrabri Councils. Emails were issued on 13 July 2020, with a follow up email submitted on 27 July 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) – Compliance	Email on 13 July 2020	Provision of Audit Terms of Reference, introduction to team, outline date of audit and provide opportunity to comment.	<ul style="list-style-type: none"> Site water management and implementation of the water management plan; and Implementation of the air quality and greenhouse gas management plan. 	Refer to Sch. 3 C 39 of CoA Refer to Sch. 3 C 29 of CoA
Department of Planning, Industry and Environment (DPIE) – Resource Regulator	Email on 13 July 2020 and follow up on 27 July 2020	Provision of Audit Terms of Reference, introduction to team, outline date of audit and provide opportunity to comment.	<ul style="list-style-type: none"> Referred to regulatory actions from a number of Government Agencies (no further detail) 	Refer to CoA
Natural Resource Access Regulator (Water)	Email on 13 July 2020 and follow up on 27 July 2020	Provision of Audit Terms of Reference, introduction to team, outline date of audit and provide opportunity to comment.	No response received	N/A
New South Wales Environment Protection Authority (NSW EPA)	Email on 13 July 2020 and follow up on 27 July 2020	Provision of Audit Terms of Reference, introduction to team, outline date of audit and provide opportunity to comment.	No response received	N/A
Narrabri Shire Council	Email on 13 July 2020 and follow up on 27 July 2020	Provision of Audit Terms of Reference, introduction to team, outline date of audit and provide opportunity to comment.	No response received.	N/A
Gunnedah shire Council	Email on 13 July 2020 and follow up on 27 July 2020	Provision of Audit Terms of Reference, introduction to team, outline date of audit and provide opportunity to comment.	The Council raised no areas of concern.	N/A
Community Consultation Committee (CCC)	Email on 13 July 2020	Provision of Audit Terms of Reference, introduction to team, outline date of audit and provide opportunity to comment.	The CCC requested consideration of bushfire management in the context of rehabilitation.	Sch. 3 C 59 of CoA

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 air quality, water management and bushfire management. 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 six 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.
- **Obs:** Observations are recorded where the audit identified issues of concern which do not strictly relate to the scope of the audit or assessment of compliance.

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 "Post Approval Requirements – Independent Audit" issued May 2020.

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.

3. AUDIT FINDINGS

3.1 Previous Audit Follow Up

The last audit was conducted by ERM for the period 1 August 2014 to 31 July 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	NCO Response/Action	2020 Status
<i>Minister's Conditions of Approval PA 11_0047 (Mod 8)</i>					
2.14	By the end of December 2013, or as otherwise agreed by the Secretary, the Proponent shall surrender the existing development consent (DA-88-4-2005) for the Tarrawonga Coal Mine in accordance with Section 104A of the EP&A Act. Prior to the surrender of this development consent, the conditions of this approval shall prevail to the extent of any inconsistency with the conditions of the development consent.	Auditor reviewed letter from Department of Planning and Environment confirming voluntary surrender of DA-88-4-2005. DA surrendered during the reporting period but not by December 2013. No further action required.	ANC	Action complete	Deemed as Not Triggered during this audit.
2.21	By the end of March 2013, unless otherwise agreed by the Secretary, the Proponent shall enter into a planning agreement with Council in accordance with: (a) Division 6 of Part 4 of the EP&A Act; and (b) the terms of the Proponent's offer provided in Appendix 3.	Voluntary Planning Agreement between TPCL and Narrabri Shire Council dated 26 October 2016. Given the date of the agreement, the condition is considered an administrative non-compliance. No further action required.	ANC	Action complete	Deemed as Not Triggered during this audit.
3.8	The Proponent, together with the owners of the Rocglen and Vickery coal mines, shall ensure that the noise generated on public roads by the Project and the other mines, does not exceed the criteria in Table 4 at any existing residence on privately-owned land. However, these criteria do not apply if the Proponent has a written agreement with the relevant landowner to exceed the criteria, and the Proponent has advised the Department in writing of the terms of this agreement.	No agreements are held with landowners adjacent to haul route. No coal haulage at night. Noise monitoring reports reviewed demonstrated no exceedence of criteria. Three monitoring locations (2 properties) – 2 residences on Brooklyn and Werona Report states that for practical reasons it is not possible to undertake monitoring for 15 hours. The approach here is to monitor noise over a representative one hour period and utilise the results of this to theoretically predict noise over the compliance period.	ANC	TCM to raise practicality of meeting condition with DP&E Timing: 31/12/2017	Deemed as Non-complaint during this audit due to non-completion of the monitoring for the 2017 calendar year.
3.9	The Proponent shall: (a) ensure that: <ul style="list-style-type: none">- all trucks, dozers, drills and excavators purchased for used on the site after the date of this approval are commissioned as noise suppressed (or attenuated) units;- improvements are made to existing noise suppression equipment as improved technology becomes available where reasonable and feasible; and (b) monitor and report on the implementation of these requirements annually on its website.	(a) During the reporting period sound power level testing identified that three excavators and a drill had results greater than projected. (b) AEMR – authorisation date 28/2/2017 – demonstrates annual sound power level testing.	NC	SPL modification approved by the Department. No action required.	This condition has been replaced.

Item No	Assessment Requirement	Comment	2017 Audit Classification	NCO Response/Action	2020 Status
3.11	<p>The Proponent shall:</p> <p>(a) implement best management practice to minimise all operational, low frequency, road and rail traffic noise levels associated with the project;</p> <p>(b) operate a comprehensive on-site noise management system that uses a combination of predictive meteorological forecasting and real-time noise monitoring data to guide the day to day planning of mining operations and the implementation of both proactive and reactive noise mitigation measures to ensure compliance with the relevant conditions of this approval;</p> <p>(c) maintain the effectiveness of noise suppression equipment on plant at all times and ensure defective plant is not operationally used until fully repaired;</p> <p>(d) ensure that noise attenuated plant is deployed preferentially in locations near to sensitive receivers;</p> <p>(e) minimise the noise impacts of the project during meteorological conditions under which the noise limits in this approval do not apply (see condition 13);</p> <p>(f) ensure that project related trains on the Boggabri spur line only use locomotives that are approved to operate on the NSW rail network in accordance with the noise limits in ARTC's EPL (No. 3142);</p> <p>(g) use its best endeavours to ensure that project-related rolling stock supplied by service providers on the Boggabri rail spur line is designed, constructed and maintained to minimise noise; and</p> <p>(h) co-ordinate the noise management on site with the noise management at other mines within the Leard Forest Mining Precinct, to minimise the cumulative noise impacts of these mines, to the satisfaction of the Secretary.</p>	<p>The Noise Management Plan was approved by the Department 20 Jan 2015. NMP developed to address the operational aspects detailed. It is noted that the NMP did not have the Leard Forest Mining Precinct Noise Management Strategy included.</p> <p>(a) all roads are sealed that are used as haul roads by the mine, monitoring of road traffic noise is undertaken, though is undertaken at one hour intervals and extrapolated rather than for an entire 15 hour period as required by the condition;</p> <p>(b) meeting minutes observed with reference to noise conditions and compliance. Real time noise monitoring records were observed, which displayed wind speed data. Proactive and reactive noise mitigation measures were observed on a site toolbox talk discussion board.</p> <p>(c) there were exceedences noted in the report above – the report outlines a drill that was taken out of service due to SPL exceedences. Also outlines proposed works for 2xTerex RH170 excavators and Hitachi 1900 Excavator Exc 530 Timing Letter_28020217 – demonstrates attenuation modifications.</p> <p>Environment Officer indicated in interview that some plant continues to operate event though an exceedence of sound power level has been recorded. The justification given was that it is reasonable and feasible for plant to still to operate based on the evidence that exceedences of criteria at sensitive receiver monitoring locations has occurred only once in the reporting period. The commitment states that 'defective plant is not used until fully repaired'. Hence this is considered an ANC.</p> <p>(a) only attenuated plant are excavators, so no preferential requirement. No trucks within the fleet are noise attenuated.</p> <p>(b) Rail spur is not triggered because road is only method of transportation.</p> <p>(c) Rail spur is not triggered because road is only method of transportation.</p> <p>(d) The NMP states that the Leard Forest Mining Precinct Noise Management Strategy has been developed and is awaiting approval from the DP&E. No evidence was sited that approval has been received, hence this is an Administrative Non Compliance (ANC)</p>	ANC	<p>A. TCM to raise practicality of meeting condition with DP&E</p> <p>B. Timing: 31/12/2017</p> <p>C. No action required</p> <p>D. SPL Modification approved by the Department</p> <p>E. No action required</p> <p>F. No action required</p> <p>G. No action required</p> <p>H. NMS approved by the Department.</p>	Deemed as Compliant during this audit.

Item No	Assessment Requirement	Comment	2017 Audit Classification	NCO Response/Action	2020 Status
3.30	For the life of the project, the Proponent shall ensure that there is a meteorological station in the vicinity of the site that: (a) complies with the requirements in the Approved Methods for Sampling of Air Pollutants in New South Wales guideline; and (b) is capable of continuous real-time measurement of temperature lapse rate in accordance with the NSW Industrial Noise Policy, unless a suitable alternative is approved by the Secretary following consultation with the EPA.	The weather station is capable of continuous monitoring but has intermittent periods where continuous recording is not achieved due to signal drop out, as such this is considered an ANC. Calibration reports for the weather station were provided and reviewed.	ANC	No action required	Deemed a Compliant during this audit.
3.35	The Proponent shall prepare and implement a Goonbri Creek Diversion and Flood Bund Concept Design Plan, to the satisfaction of the Secretary. The plan must: (a) be prepared in consultation with DPI, OEH and the LLS; (b) be submitted to the Secretary for approval by December 2016; (c) set out the vision statement for the creek diversion; (d) assess the surface water and groundwater quality, ecology, hydrological (including flooding) and geomorphic baseline conditions within the creek; (e) set out the construction program for the creek diversion and LPB, describing how the work would be staged, and integrated with mining operations; (f) describe the revegetation program for the creek diversion and the use of a range of suitable native species; (g) establish the water quality, ecology, hydrological (including flooding) and geomorphic performance and completion criteria for the creek diversion and LPB based on the assessment of baseline conditions; and (h) be revised in consultation with DPI, OEH and the LLS, and resubmitted for approval by the Secretary in response to the findings of the detailed technical design required in condition 36 and the Monitoring and Management Plan in condition 38.	Auditor reviewed a response to DP&E regarding Goonbri Creek Diversion Design Plan. The letter states that correspondence was not received by December 2016.	ANC	No action required	Deemed as Not Triggered during this audit.

Item No	Assessment Requirement	Comment	2017 Audit Classification	NCO Response/Action	2020 Status
3.40	The Proponent shall implement the biodiversity offset strategy described in the EA, summarized in Table 14 and shown conceptually in Appendix 7, to the satisfaction of the Secretary	<p>Recommendation</p> <p>Although not yet non-complaint, significant actions will be required to achieve the end landuse of open woodland (and specifically BGW EEC) in rehabilitation areas nominated as woodland (in the southern and northern emplacements).</p> <p>Maintain a clearer schedule and plans of native species planting actions (sourcing, planting, proposed works). The Annual Review reporting does not report clearly (nor contain enough detail) on native woodland rehabilitation actions, for example through the past three years some actions claimed to be deferred to the next year are not reported on in that next year. Further, when cross-checked with the native species supplier correspondence there are clearly actions being undertaken which are not being reported upon.</p>	C	<p>Revegetation schedule is coordinated, and recorded, year on year by WHC Group and reflects rehabilitation progression noted in MOP.</p> <p>The format of future Annual Reviews will be revised to include greater detail on revegetation activities undertaken.</p> <p>March 2018 – Annual Review</p>	Deemed as Compliant during this audit.
3.41	The Proponent shall contribute to the funding and preparation of the Leard Forest Mining Precinct Regional Biodiversity Strategy, as required under the approvals for the Boggabri coal mine and Maules Creek coal mine, to the satisfaction of the Secretary.	<p>Group Superintendent - Environment (Compliance), Site Environment Officer and Specialist-Offsets interview stated that the responsibility for the LFMPRBS was taken over by the DP&E, although no evidence of the removal of Whitehaven's responsibility to contribute to the preparation of the plan is available.</p> <p>A spreadsheet reviewed by the auditor identified the breakdown of relative financial responsibility for some plans between the three projects, however it contains no dollar values for the LFMPRBS.</p> <p>ERM considers a non-compliance on the basis of:</p> <ul style="list-style-type: none"> No evidence of reports meeting each of the timings for Stages 1, 2 & 3. No evidence of Whitehaven financial contribution to the strategy. <p>No evidence of Whitehaven contribution to the preparation of the LFMPRBS (or in the case that the DP&E took this over, evidence of that agreement).</p>	ANC	<p>RBS approved.</p> <p>TCM to confirm with DP&E that intent of condition has been met.</p> <p>Timing 31/12/2017</p>	No longer applicable due to the Biodiversity Offset Strategy prepared by the Department of Planning and Environment.
3.49	<p>By the end of May 2013, the Proponent shall lodge a Conservation and Biodiversity Bond with the Department to ensure that the biodiversity offset strategy is implemented in accordance with the performance and completion criteria of the Biodiversity Management Plan. The sum of the bond shall be determined by:</p> <p>(a) calculating the full cost of implementing the biodiversity offset strategy (other than land acquisition costs); and</p>	<p>Predates this audit period. The previous IEA (SMEC 2014) stated against this condition: "Biodiversity Management Plan not approved, not able to calculate bond amount, not compliant with deadline stated" and adjudged as "Not Compliant Administrative".</p> <p>No evidence of a conservation bond exists which appears to have been required by May 2013 (or if not, then following the BMP preparation (ELA April 2015)).</p>	ANC	<p>Agreement between DP&E and TCM in place. Bond to be calculated following approval of BMP.</p> <p>Timing: TBA.</p>	Deemed as Compliant during this audit.

Item No	Assessment Requirement	Comment	2017 Audit Classification	NCO Response/Action	2020 Status
	<p>(b) employing a suitably qualified quantity surveyor to verify the calculated costs, 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>				
3.51	<p>The Proponent shall prepare and implement an Aboriginal Heritage Conservation Strategy for the project and the Biodiversity Offset Strategy areas to the satisfaction of the Secretary. This Strategy must enhance and conserve the Aboriginal cultural heritage values (both cultural and archaeological) and provide for their long-term protection and management. The Strategy must:</p> <p>(a) be prepared by suitably qualified and experienced person/s whose appointment has been endorsed by the Secretary;</p> <p>(b) be prepared in consultation with OEH, the local Aboriginal community and other mines within the Leard Forest Mining Precinct, and submitted to the Secretary for approval within 12 months from the date of project approval;</p> <p>(c) identify the Aboriginal cultural heritage values of the Biodiversity Offset Strategy areas;</p> <p>(d) identify areas of high Aboriginal cultural heritage significance within both the site and the Leard Forest Mining Precinct;</p> <p>(e) identify a range of options for enhancing and conserving Aboriginal cultural heritage values, with specific consideration of the potential for the long-term protection and management of significant sites within either the site, the Biodiversity Offset Strategy areas or other lands within the Leard Forest Mining Precinct identified as having high cultural heritage significance to the Aboriginal community; and</p> <p>(f) consider cumulative impacts and potential for developing joint initiatives with other mines within the Leard Forest Mining Precinct for enhancing and conserving Aboriginal cultural heritage values.</p>	<p>An Aboriginal Heritage Conservation Strategy (AHCS) has been prepared in consultation with OEH and submitted to the Secretary, within an approved extension period. However the Strategy is yet to be approved by the Secretary and is awaiting approval.</p>	ANC	No action required	Deemed as Compliant during this audit.

Item No	Assessment Requirement	Comment	2017 Audit Classification	NCO Response/Action	2020 Status
3.61	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 depicted conceptually in Appendix 8) and comply with the objectives in Table 15.	<p>Field inspection observed rehabilitation on the northern and southern emplacements. Refer MCoA 50 and Section 8.2 for appraisal.</p> <p>The MOP (2015-2020) (SLR 2016) details the procedure to meet these conditions, (specifically sections 5 and 6) and plans showing the annual progress of site land areas during the MOP (Plan 3), trending towards the final land use (Plan 4). It identifies Domains including the final void, surface infrastructure, agricultural land and remaining land and sets out the actions to meet the condition's requirements. No agricultural land will be established during this MOP term (MOP section 7, Table 21) therefore trajectory towards the 210ha of agricultural land is not assessable. MOP section 7, Table 20 states that during the term of the MOP 78.93ha of woodland areas will be rehabilitated.</p> <p>The MOP section 7, Table 20 shows cumulative rehabilitation will be at 64.9ha at end of calendar year 2016). The AR (2016) states that active rehabilitation area is 59ha and area being prepared for rehabilitation is 9.9ha (totalling 68.9ha). Those numbers for 2017 are 70.76ha (MOP Table 20) and 68.9ha active rehabilitation and 5.8 in preparation for rehabilitation (totalling 74.7ha).</p> <p>Goonbri Creek diversion requirements are not triggered.</p> <p>Notable site observations regarding features:</p> <p>Mine site (as a whole) - rehabilitated areas appear to be of slope angles to manage erosion.</p> <p>Drainage structures observed on northern and southern emplacements to direct water off the rehabilitated slopes.</p> <p>Final void - objectives not triggered.</p> <p>Agricultural land - no areas have been rehabilitated yet (nor are required by the MOP), therefore not triggered.</p> <p>Woodland areas - refer field inspection comment above.</p> <p>Community - Site Environment Officer stated that public safety is managed by maintaining a secure site. Assessing performance to manage adverse socio-economic consequences is not triggered as planned closure is outside the scope of this audit and the current MOP period (2015-2020).</p>	Obs	<p>MCoA 50 noted as C.</p> <p>Progression of rehabilitation as per MOP noted.</p>	Deemed as Compliant during this audit.

Item No	Assessment Requirement	Comment	2017 Audit Classification	NCO Response/Action	2020 Status
3.64(h)	The Proponent shall prepare and implement a Rehabilitation Management Plan to the satisfaction of DRE. This plan must: (h) include a program to monitor, independently audit and report on the effectiveness of the rehabilitation measures, and progress against the detailed performance and completion criteria;	Recommendation In summary, the auditor recommended more thorough implementation and recording of MOP requirements.	ANC	2017 MOP will be revised to more clearly describe implementation, monitoring and auditing of rehabilitation. 31st December 2017	Deemed as Compliant during this audit.
5.2	The Proponent must assess and manage project-related risks to ensure that there are no exceedences of the criteria and/or performance measures in schedule 3. Any exceedence of these criteria and/or performance measures constitutes a breach of this approval and may be subject to penalty or offence provisions under the EP&A Act or EP&A Regulation. Where any exceedence of these criteria and/or performance measures has occurred, the Proponent must at the earliest opportunity: (a) take all reasonable and feasible steps to ensure that the exceedence ceases and does not reoccur; (b) consider all reasonable and feasible options for remediation (where relevant) and submit a report to the Department describing those options and any preferred remediation measures or other courses of action; and (c) implement remediation measures as directed by the Secretary, to the satisfaction of the Secretary.	These documents demonstrated a non-compliance with regards to plant sound power levels and avoiding the requirement to stop using the equipment, on the basis that attended noise monitoring at residences has identified no noise exceedences since March 2015. TCPL are attempting to manage this by removing the criteria to cease using SPL exceeding material at the site. No evidence that this has been accepted to the satisfaction of the Secretary.	ANC	SPL modification has been approved. No action required.	Deemed as Compliant during this audit.
Statement of Commitments					
1.2.30	The Project final landform and revegetation program will provide for a combination of approximately 752 ha of native woodland/forest and some 210 ha of Class 3 agricultural suitability land.	MOP (2015-2020) (SLR 2016) sets out rehabilitation actions to achieve commitment (specifically sections 5-7, with monitoring in section 8), and plans showing annual progress through the years of the MOP (Plan 3) and final land use (Plan 4). Annual review reports rehabilitation progress for 2016 (which is largely in accordance with the MOP with a reported greater area of actual rehabilitation vs predicted). No verification of the areas contained in the final landform areas is available. MOP and Annual Reports should include table showing progress towards final landform areas.	Obs	2017 MOP and Annual Review will include a table showing progress towards final landform areas. 31st December 2017 – MOP March 2018 – Annual Review	Deemed as Compliant during this audit.
1.2.31	The agricultural land will be capable of being used for pasture production for grazing and occasional cropping. Revegetation of woodland/forest areas will include the planting of species characteristic of the local vegetation communities, including species from the Box-Gum Woodland endangered ecological community.	MOP (2015-2020) (SLR 2016) Plan 4 shows post mining land use containing agricultural land, and section 5.2, Table 10 includes commitment for rehabilitation to agricultural land to that class. MOP (2015-2020) (SLR 2016) identifies no rehabilitation to agricultural land is planned during this MOP period (Plan 3).	Obs	Revegetation, including maintenance revegetation, of rehabilitated areas will be undertaken in accordance the MOP to achieve target vegetative communities. Ongoing	Deemed as Compliant during this audit.

Item No	Assessment Requirement	Comment	2017 Audit Classification	NCO Response/Action	2020 Status
		Field inspection identified tree species characteristic of the BGW EEC. Youngest rehabilitation (the farthest north) contains tree and shrub species of the BGW EEC although the ground layer germination appears of questionable species composition when compared with the BGW EEC list. Older rehabilitation areas will require species augmentation to enhance values to be more closely aligned to the BGW EEC (from the very poor quality southern emplacement slopes which will require significant rehabilitation rework to the western slope of the northern emplacement which has tree species however will require infill plantings or seed spreading). Rehabilitation areas are not currently non-compliant however work will be required to maintain integrity of germinating areas (the youngest) and enhance the native species diversity and value in the older areas			
1.2.33	A Rehabilitation Management Plan will be developed and implemented for the Project, including a rehabilitation monitoring program designed to track the progress of rehabilitation and revegetation.	<p>The auditor understands there is not RMP for the project. Site Environmental Officer in site interview stated that the BMP (ELA April 2015) and the MOP (2015-2020) (SLR 2016) together form the RMP. Those documents together include the relevant detail as cross referenced below.</p> <p>MOP (2015-2020) (SLR 2016) details rehabilitation monitoring (section 8). BMP (ELA April 2015) details rehabilitation monitoring requirements for flora and fauna (including monitoring weeds and feral species).</p> <p>Implementation of the measures identified in (e), (f) and (g) is not well demonstrated through records. Evidence that woodland rehabilitation monitoring is occurring is available through annual spring monitoring (ELA 25 May 2016 and ELA 29 May 2017), although in itself it is not fully implementing MOP Section 8.1.3 with no monitoring occurring in the regenerating native vegetation in the north east corner of ML1579.</p> <p>No evidence available of implementation of parameters stated in section 5 of the BMP (ELA April 2015) including: weeds, feral animal monitoring and nest box monitoring.</p> <p>The MOP (2015-2020) (SLR 2016) section 3.2.4 states that vertebrate pests will be monitored on an as needs basis (not seasonal) and this appears to be done in an ad hoc manner. That section states weeds will be monitored monthly in areas including rehabilitation areas. No evidence exists of this occurring.</p>	Obs	<p>The approved MOP meets the requirements of an RMP. Monitoring requirements will be summarised in the 2017 MOP.</p> <p>31st December 2017</p>	Deemed as Compliant during this audit.

Item No	Assessment Requirement	Comment	2017 Audit Classification	NCO Response/Action	2020 Status
		TCPL to develop a clear, one-page annual monitoring schedule that integrates all requirements from all plans to make it clear what needs to be monitored and when. Evidence of regular monitoring of rehabilitation ecological risks and performance is piecemeal or absent (beyond only the woodland rehabilitation monitoring undertaken annually in spring).			
EPL 12635					
L4.4	<p>Determining Compliance</p> <p>To determine compliance:</p> <p>(a) with the Leq(15 minute) noise limits in the Noise Limits table, the noise measurement equipment must be located:</p> <p>i. approximately on the property boundary, where any dwelling is situated 30 metres or less from the property boundary closest to the premises; or</p> <p>ii. within 30 metres of a dwelling façade, but not closer than 3m, where any dwelling on the property is situated more than 30 metres from the property boundary closest to the premises; or, where applicable</p> <p>iii. within approximately 50 metres of the boundary of a National Park or a Nature Reserve.</p> <p>(b) with the LA1(1 minute) noise limits in the Noise Limits table, the noise measurement equipment must be located within 1 metre of a dwelling façade.</p> <p>(c) with the noise limits in the Noise Limits table, the noise measurement equipment must be located:</p> <p>i. at the most affected point at a location where there is no dwelling at the location; or</p> <p>ii. at the most affected point within an area at a location prescribed by part (a) or part (b) of this condition.</p>	Monitoring locations are stated in the NMP and in quarterly monitoring report. Site inspection demonstrated where noise monitoring is undertaken. The location of monitoring at Barbers Lagoon is on the property boundary however the residence is approximately 200m from the monitoring location. Hence this is considered a non-compliance.	NC	<p>Modification to the EPL in draft to be submitted to EPA to amend condition.</p> <p>Timing: 30 November 2017</p> <p>TCM contest the weighting of NC; monitoring occurs at a location closer to the operation and due to distance from noise source the variability is immaterial. ANC considered appropriate.</p>	Deemed as Non-compliant during this audit.
O1.1	<p>Licensed activities must be carried out in a competent manner.</p> <p>This includes:</p> <p>(a) the processing, handling, movement and storage of materials and substances used to carry out the activity; and</p> <p>(b) the treatment, storage, processing, reprocessing, transport and disposal of waste generated by the activity.</p>	<p>Emplacement, topsoil and timber reuse observed.</p> <p>Training matrix documents training needs for all employees.</p> <p>TCPL has well developed waste management strategies for all liquid and solid wastes.</p> <p>The identified non-compliances recorded against EPL limits as discussed against other relevant conditions is not considered reflective of a lack of competence or effort with regard to environmental management.</p> <p>The auditor observed an area for improvement in relation to housekeeping and storage of chemicals and hydrocarbons at the maintenance yard and</p>	Obs	<p>TCPL to undertake a review of housekeeping and storage of chemicals and hydrocarbons at the maintenance yard and laydown; and rectify current management as required.</p> <p>31st December 2017</p>	Deemed as Compliant during this audit.

Item No	Assessment Requirement	Comment	2017 Audit Classification	NCO Response/Action	2020 Status								
		laydown. One example included compatibility of stored Class 2 and Class 3 chemicals in same cabinet in Boiler Workshop. It is recommended that all chemicals are stored and appropriately segregated in cabinets.											
O4.2	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 updated annually however online PIRMP dated August 2015. Update the website with up to date PIRMP.	Obs	Completed; website updated.	Deemed as Compliant during this audit.								
M2.2	Air Monitoring Requirements Point 28 <table><tr><td>Pollutant</td><td>Unit of measure</td><td>Frequency</td><td>Sampling method</td></tr><tr><td>PM10</td><td>Micrograms per cubic metre</td><td>Continuous</td><td>AM-22</td></tr></table>	Pollutant	Unit of measure	Frequency	Sampling method	PM10	Micrograms per cubic metre	Continuous	AM-22	Technical non-compliance as continuous monitoring not able to be achieved due to periodic connection failure and maintenance. Does not require notification of NC as impact negligible.	NC	No action required. TCM contest NC weighting based administrative nature of NC; ANC considered appropriate.	Deemed as Compliant during this audit.
Pollutant	Unit of measure	Frequency	Sampling method										
PM10	Micrograms per cubic metre	Continuous	AM-22										
M3.1	Monitoring for the concentration of a pollutant emitted to the air required to be conducted by this licence must be done in accordance with: (a) any methodology which is required by or under the Act to be used for the testing of the concentration of the pollutant; or (b) if no such requirement is imposed by or under the Act, any methodology which a condition of this licence requires to be used for that testing; or (c) if no such requirement is imposed by or under the Act or by a condition of this licence, any methodology approved in writing by the EPA for the purposes of that testing prior to the testing taking place.	Real time air quality monitor does not meet AM-22 as required by EPL. Note: Dual monitoring system measures two different particulates; one result is calculated rather than measured which does not meet AM-22.	NC	Approach accepted by EPA across the industry. No action required. TCM contest NC weighting based administrative nature of NC; ANC considered appropriate.	Deemed as Compliant during this audit.								
M4.1	For each monitoring point specified in the table below the licensee must monitor (by sampling and obtaining results by analysis) the parameters specified in Column 1. The licensee must use the sampling method, units of measure, averaging period and sample at the frequency, specified opposite in the other columns. Point W1	The requirement for continuous monitoring is not met due to temporary outages as a result of technical issues such as internet drop out or temporary instrument failure Maintenance of accuracy and proper functioning of the monitor was demonstrated by the calibration report provided for weather station.	NC	No action required TCM contest NC weighting based administrative nature of NC; ANC considered appropriate.	Deemed as Compliant during this audit.								

Item No	Assessment Requirement	Comment	2017 Audit Classification	NCO Response/Action	2020 Status
M7.1	For each monitoring point specified below, the Licensee must monitor the noise or vibration parameter 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. Point TN2, TN3, TN4	Auditor review identified that LAeq (15 minute) is all that is displayed in reports prior to quarter four 2016. All other units of measurement were not provided prior to quarter 4 2016 and hence these reports are considered non-compliant. Since quarter four 2016 this oversight has been rectified and all units of measurement are displayed.	NC	As noted; report structure has been amended to report accordingly. No action required. TCM contest NC weighting based administrative nature of NC; ANC considered appropriate.	Deemed as Compliant during this audit.
M7.4	For the purpose of conditions M7.1, M7.2 and M7.3 the monitoring locations are described as:	The auditor observed the noise monitoring locations in the field. Monitoring locations are stated in the NMP and in quarterly monitoring report. Site inspection demonstrated where noise monitoring is undertaken. The location of monitoring at Barbers Lagoon is on the property boundary however the residence is approximately 200m from the monitoring location. Hence this is considered a non-compliance. New EPL includes TB1.	NC	Modification to the EPL in draft to be submitted to EPA to amend condition. Current monitoring occurs at a location closer to noise source. Timing: 30 November 2017	Deemed as Compliant during this audit.
Mining Lease 1579					
2.1 (b)	The Mining Operations Plan together with environmental conditions of development consent and other approvals will form ongoing monitoring of the project.	Implementation of monitoring as required in the MOP is not well demonstrated through records. Evidence that woodland rehabilitation monitoring is occurring is available through annual spring monitoring (ELA 25 May 2016 and ELA 29 May 2017), although in itself is not fully implementing MOP section 8.1.3 with no monitoring occurring in the regenerating native vegetation in the north east corner of ML1579. The MOP (2015-2020) (SLR 2016) section 3.2.4 states that vertebrate pests will be monitored on an as needs basis however this was not verified during the audit. That section states weeds will be monitored monthly in areas including rehabilitation areas (monthly inspection checklists were sighted containing a question regarding weeds in rehabilitation areas).	NV	Vertebrate Pest Monitoring Reports available to demonstrate compliance.	Deemed as Compliant during this audit.
2.4a	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:- area(s) proposed to the disturbed under the Plan;	MOP (2015-2020) (SLR 2016) details rehabilitation planning (section 5), implementation (section 7) and MOP Plans 3(a-f) (annual timeslices) and 4 (post-mining landuse). Section 2.3.10 contains a table showing the material production schedule for six years. Plans are only for 5 years and material production schedule is only for 6 years, as such this is considered to be an ANC.	ANC	Amend MOP Timing: 31 December 2017	Deemed as Compliant during this audit.
2.4e	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:- existing flora and fauna on site	BMP (ELA April 2015) describes and demonstrates the flora and fauna on the site (especially shown in Figures 3.1, 3.2 and 3.3). Not contained in MOP.	ANC	Amend MOP Timing: 31 December 2017	Deemed as Compliant during this audit. Updated plans identifying existing flora and fauna have been included in MOP Revision F (Plans 4B, C and D).

Item No	Assessment Requirement	Comment	2017 Audit Classification	NCO Response/Action	2020 Status
2.4g	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:- areas of particular environmental, ecological and cultural sensitivity and measures to protect these areas	BMP (ELA April 2015) describes and demonstrates the flora and fauna on the site (especially shown in Figures 3.1, 3.2 and 3.3). Not contained in MOP.	ANC	Amend MOP Timing: 31 December 2017	Deemed as Compliant during this audit. Updated plans identifying areas of environmental, ecological or cultural sensitivity have been included in MOP Revision F (Plans 4B, C and D).
11b	Blast Overpressure The lease holder must ensure that the blast overpressure noise level generated by any blasting within the lease area does not exceed 120dB (linear) and does not exceed 115dB (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.	A number of exceedences of blast overpressure on project related land – (January 2015 was the item observed by auditor). These have previously been reported to the EPA but no longer reported as they are on project land. Review of records available for property purchased and blasting records demonstrated no exceedences prior to the properties being purchased by TCPL. The AEMR of the 2015/2016 reporting period outlined that a blast on 19 August 2016 generated a Blast overpressure greater than the 120dB limit and exceeded limit of 5% of blasting above 115dB over a period of 12 months.	NC	Historical Non-compliance; no action required. TCM contest NC weighting; based on instances occurring on project related land. Low considered appropriate.	Deemed a Complaint during this audit.
15.1	At least twenty eight days prior to commencement of drilling operations the lease holder must notify the relevant Department of Natural Resources regional hydrogeologist of the intention to drill exploratory drill holes together with information on the location of the proposed holes.	It could not be demonstrated that the notification occurred 28 days prior to the commencement of drilling operations. Email demonstrated that the notification had taken place (but could not be determined if 28 days prior to drilling commencement.	ANC	The last exploration drilling within ML1579 commenced on 19 September 2014 and was included in a notification to NSW Office of Water 10 March 2014	Deemed as Not Triggered during this audit.
15.2d	If the lease holder drills exploratory drill holes he must satisfy the Director-General that:- if any drill hole meets natural or noxious gases it is plugged or sealed to prevent their escape	Auditor review of the 2016 Exploration report states that 'Selected seams were tested for gas desorption and composition' – but clear evidence of noxious gas testing could not be identified. If not currently being undertaken, noxious gas testing needs to be conducted and clearly stated in report	NC	It is not a requirement of Exploration reporting to report against specific conditions of the authority No drilling included in 2016 Exploration report was completed within ML1579 There have been no reports of any drill hole meeting natural or noxious gas for the reporting periods 2015–2017 Selected seams from one drill hole (TA156C) were tested for gas content with no Hydrogen Sulfide (H ₂ S) detected	Deemed as Not Triggered during this audit.
15.2e	If the lease holder drills exploratory drill holes he must satisfy the Director-General that:- if any drill hole meets an artesian or sub artesian flow it is effectively sealed to prevent contamination of aquifers	Auditor review of the exploration reports could not identify discussion of interaction with artesian flow.	ANC	It is not a requirement of Exploration reporting to report against specific conditions of the authority There have been no reports of any drill hole artesian or sub artesian flow for the reporting periods 2015–2017 All drill holes completed outside the mine pre-strip area were cemented to surface; other drill holes were mined out within six months of completion	Deemed as Not Triggered during this audit.
15.2g	If the lease holder drills exploratory drill holes he must satisfy the Director-General that:- once any drill hole ceases to be used the land and its immediate vicinity is left clean, tidy and stable condition.	Auditor review of the exploration report could not identify a clear statement on the final condition of the drill hole (tidiness or cleanliness) other than the fact that the holes were grouted. Provide indication of final condition of drill hole on completion to address this condition.	ANC	It is not a requirement of Exploration reporting to report against specific conditions of the authority All drill hole completed outside the mine pre-strip area were cemented to surface, and the sites rehabilitated; other drill holes were mined out within six months of completion Drill sites of at least 9 of the 19 drill holes completed in ML1579 for the reporting periods 2015–2017 have been mined out by the advancing open cut	Deemed as Not Triggered during this audit.

Item No	Assessment Requirement	Comment	2017 Audit Classification	NCO Response/Action	2020 Status
Mining Lease 1693					
5a	<p>The lease holder must report any environmental incidents. The report must:</p> <ul style="list-style-type: none"> i. be prepared according to any relevant Departmental guidelines; ii. (ii) be submitted within 24 hours of the environment incident occurring: 	<p>Auditor document review and interview with the Environmental Officer identified that no environmental incidents occurred on this mining lease.</p> <p>Other incidents have occurred and evidence of reporting has been observed. The incident report referenced was not submitted within 24 hours.</p> <p>Report all environmental incidents within 24 hours of the incident occurring.</p>	NC	<p>Ensure any incidents are duly reported.</p> <p>Timing: Ongoing</p> <p>TCM contest NC weighting; noting evidence of reporting to respective agencies. ANC considered appropriate.</p>	Deemed as Compliant during this audit.
Mining Lease 1685					
3f	<p>The lease holder must prepare a Rehabilitation Report to the satisfaction of the Minister. The report must:</p> <ul style="list-style-type: none"> (i). provide a detailed review of the progress of rehabilitation against the performance measures and criteria established in the approved MOP; (ii). be submitted annually on the grant anniversary date (or at other such times as agreed by the Minister); and (iii). be prepared in accordance with any relevant annual reporting guidelines published on the Department's website at www.resources.nsw.gov.au/environment. <p>Note: the Rehabilitation Report replaces the AEMR</p> 	<p>There is no standalone Rehabilitation Report and the contents are contained within the Annual Review (2016).</p> <ul style="list-style-type: none"> (i). Annual Review (2016) section 8 does not contain a detailed comparison of landscape performance against completion criteria and is qualitative in nature. NC: no detailed review of progress against completion criteria. (ii). ML conditions dated 18 July 2013. Annual Review (2016) dated 28 February 2017 reporting for the period 1 May 2016 to 31 December 2016. ANC: dates are misaligned. (iii). Annual Review (2016) generally in accordance with guidelines. 	NC	<p>No action required. Previous AEMR's/Annual Reviews accepted by DRG (formerly DRE).</p> <p>TCM contest non-compliance classification noting that the AEMR/Annual Reviews have been accepted by DRG (formerly DRE).</p>	Deemed as Compliant during this audit.
4c	<p>The Compliance Report must be lodged with the Department annually on the grant anniversary date for the life of this mining licence.</p>	<p>Environmental Officer interview identified that reports have been submitted in conjunction with ML1579 reporting timeframes.</p> <p>AEMR/ER may provide demonstration that the methodology to provide all on the same date as the 1579 is satisfied – though likely was outside of the reporting period for this audit. Dates of submission did seem varied and inconsistent.</p> <p>Consolidated report summarises all leases areas and is provided at one time, corresponding to the reporting period for one of the leases. This eliminates the requirement to provide similar report at three different times. Evidence for approval of this approach from Secretary to be provided. If not available such approval is to be obtained.</p>	ANC	<p>No further action required.</p> <p>DRG have advised acceptance of annual submission of Annual Reviews inclusive of compliance reporting of multiple Mining Leases, after calendar year reporting period, and in accordance with Annual Review Guidelines (2015).</p>	This condition has been replaced.
5a	<p>The lease holder must notify the Department of all:</p> <ul style="list-style-type: none"> (i). breaches of the conditions of this mining lease or breaches of the Act causing or threatening material harm to the environment; and (ii). breaches of environmental protection legislation causing or threatening material harm to the environment (as defined in the Protection of the Environment Administration Act 1991) arising in 	<p>No environmental incidents occurred on this mining lease.</p> <p>Incidents against other conditions have occurred as detailed in this report and evidence of reporting has been observed. However, the incident report referenced was not submitted within 24 hours.</p>	NC	<p>Ensure any incidents are duly reported.</p> <p>Timing: Ongoing</p> <p>TCM contest NC weighting; noting evidence of reporting to respective agencies. ANC considered appropriate.</p>	This condition has been removed.

Item No	Assessment Requirement	Comment	2017 Audit Classification	NCO Response/Action	2020 Status
	connection with significant surface disturbing activities, including mining operations, mining purposes and prospecting operations, under this mining lease. The notification must be given immediately after the lease holder becomes aware of the breach.	Report all environmental incidents within 24 hours of the incident occurring as this is the most stringent criteria at the site			
5b	<p>The lease holder must submit an Environmental Incident report to the Department within seven (7) days of all breaches referred to in condition 5(a) (i) and (ii). The Environmental Incident report must include:</p> <ul style="list-style-type: none"> (i). The details of the mining lease; (ii). Contact details for the lease holder; (iii). A map identifying the location of the incident and where material harm to the environment has or is likely to occur; (iv). A description of the nature of the incident or breach, likely causes and consequences; (v). A timetable showing actions taken or planned to address the incident and to prevent future incidents or breaches referred to in 5(a). (vi). A summary of all previous incidents or breaches which have occurred in the previous 12 months relating to significant surface disturbing activities, including mining operations, mining purposes and prospecting operations under this mining lease. <p>Note: the lease holder should have regard to any relevant Director-general's guidelines in the preparation of an Environmental Incident Report. Refer to www.resources.nsw.gov.au/environment for further details.</p>	<p>No environmental incidents occurred on this mining lease.</p> <p>Incidents against other conditions have occurred as detailed in this report and evidence of reporting has been observed. However, the incident report referenced was not submitted within 24 hours.</p> <p>Report all environmental incidents within 24 hours of the incident occurring as this is the most stringent criteria at the site.</p>	NC	<p>Ensure any incidents are duly reported.</p> <p>Timing: Ongoing</p> <p>TCM contest NC weighting; noting evidence of reporting to respective agencies. ANC considered appropriate.</p>	Deemed as Compliant during this audit.

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 three complaints were recorded during 2017 (for the period 1 December to 31 December). All complaints raised were in relation to dust;
- One complaint was raised in 2018 related to dust; and
- Nil (0) complaints were received in 2019 or 2020 to-date.

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

3.3 Incident Summary

A review of the incidents was undertaken through a review the TCM incident and exceedance register. Below outlines the incidents recorded during the audit period:

- A total of three exceedances of EPL recorded during the audit period; one in June 2019 related to exceedance of noise levels and two in February 2020 related to an unauthorised discharge and an exceedance of criteria for wet weather discharges;
- EPA issued a Penalty Notice on 9 April 2020 in relation to the unauthorised discharge from sediment dam SD2 which occurred in February 2020;
- EPA issued a Show Cause on 25 June 2020 in relation to exceedance of oil and grease criteria in the wet weather discharge from SD14 in February 2020. TCM has responded and is awaiting feedback from EPA;
- Attended noise monitoring was not undertaken during the 2017 calendar year. DPIE issued an Official Caution Letter on 23 March 2019;
- TCM failed to notify one neighbour prior to a blast event on 18 January 2018. Warning letter received from DPIE on 8 March 2018;
- TCM was operating without an approved MOP for 10 days between 2 April and 11 April 2019. DRG issued an Official Caution on 6 November 2019;
- Clearing was undertaken outside the MOP D boundary and notified to DPIE and DRG on 23 August 2019. No action taken;
- Noise was recorded above the day time limit during attended noise monitoring on 7 June 2019. TCM is awaiting response from EPA;
- Elevated PM10 levels were recorded on sixteen (16) occasions between January and October 2019. DPIE advised that result were recorded in days affected by extraordinary events (dust storms and bushfires) and are not considered exceedances with respect to the air quality criteria in the Project Approval; and
- Elevated PM10 levels were recorded on seven occasions between November and December 2019. DPIE advised that result were recorded in days affected by extraordinary events (dust storms and bushfires) and are not considered exceedances with respect to the air quality criteria in the Project Approval.

3.4 Environmental Monitoring Performance

3.4.1 Noise

Quarterly acoustic monitoring was undertaken between 2017 to 2020 by qualified third party contractors, SLR and Wilkinson Murray. The following noise exceedances were recorded during the audit period:

- 7 June 2019: Matong/Coolmangah monitoring location, Day – LAeq (15 minute) of 42dB.

Following the exceedance TCM conducted a review of the monitoring. It was concluded that the monitoring was not conducted at the residence and a correction factor had not been applied. TCM is awaiting a response from EPA regarding the reported exceedance and investigation.

3.4.2 Air quality

Monthly dust deposition was conducted by ALS during the audit period. The following exceedance of assessment criteria were reported for the audit period:

- 2019 – twenty two (22) exceedances of PM10 levels recorded.

All exceedances were investigated and found to be associated with regional events including dust storms and bushfires. Auditors reviewed correspondence confirming DPIE acknowledged that there were 18 out of 22 exceedances recorded on days that regional air quality alerts were issued by Office of Environment Heritage (OEH) or days of 'extraordinary event'.

Auditors sighted the weather station onsite which provides the site's meteorological data. Meteorological data from the onsite weather station was provided for the audit period.

3.4.3 Blasting

Blasting has been conducted during the audit period in accordance with the Conditions of Approval. One incident related to failure to notify a neighbour of a blast in January 2018 as detailed in *Section 3.3* above.

3.4.4 Water management

3.4.4.1 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 2020).

Two incidents related to surface water releases were recorded in February 2020 following a period of heavy intense rainfall. Refer to *Section 3.3* above.

Subsequent to the releases in February 2020 TCM has engaged a third party (Aurecon) to undertake a comprehensive review of water management at the Site. Remedial works to drop drains and sediment ponds have been recommended and are in the process of being actioned. TCM is also in the process of installing automatic water level meters on some of the sediment ponds associated with licensed discharge points which will alert the Operations team when intervention is needed, for example pumping out the ponds.

3.4.4.2 Groundwater

The groundwater monitoring program is stipulated in Section 5.4 of the approved WMP (dated March 2020). Neither the CoA nor EPL stipulates the frequency of groundwater monitoring to be undertaken. Under the WMP, depending on their location, piezometers and groundwater bores are required to be monitored on a quarterly and six monthly basis. Groundwater monitoring data provided showed that monitoring is typically completed within the WMP timeframes.

3.5 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. It was noted that a number of management plans have been updated since the original approvals issued under the Project Approval and where Secretary approval has been received the revised management plan has been implemented at the site. Most of the management plans have been revised and submitted to the Secretary at various times between 2017 and 2020, however TCM are currently awaiting formal approval for these revisions.

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*.

3.6 Environmental Protection Licence

The site operates under Environment Protection Licence (EPL) 12365 issued to Tarrawonga Coal Pty Ltd. The EPL has been varied once during the audit period on 16 January 2020.

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

2017:

- EPL R4.1 – last quarterly attended noise monitoring report 2017 was not submitted within 30 days of completion of monitoring. No further action.
- EPL M4.1 – Technical non-compliance: Periodic connection failures resulting in minor data gaps, these gaps are not material to meeting the condition. The EPA has confirmed that 100% data capture is not required for compliance with this condition. This issue has not been recorded as a non-compliance since 2018 annual return.
- EPL M3.1 – Technical non-compliance: Real time air quality monitor does not meet AM-22 as required. No further action.
- EPL M2.1 – Point 28 – Technical non-compliance: PM10 not monitored continuously in accordance with condition due to periodic connection failure and equipment repair. The EPA has confirmed that 100% data capture is not required for compliance with this condition. This issue has not been recorded as a non-compliance since 2018 annual return.

2018:

- EPL M2.1 – Point 28 and W1 – Technical non-compliance due to periodic connection failure and equipment repair. Accepted industry standard is for continuous monitoring to occur for 90% of the monitoring period. The EPA has confirmed that 100% data capture is not required for compliance with this condition. This issue has not been recorded as a non-compliance since 2018 annual return.
- EPL M2.2 – Point 28 – PM10 not monitored continuously due to periodic connection failure and equipment repair. (98% availability machine and 2% downtime). The EPA has confirmed that 100% data capture is not required for compliance with this condition. This issue has not been recorded as a non-compliance since 2018 annual return.
- EPL M4.1 - Periodic connection failures resulting in minor data gaps. (99.5% availability and 0.5% downtime). This issue has been resolved with the EPA.

2019

- EPL L4.1 – Quarterly attended noise monitoring resulted in the measure of 42dB (including 2dB Noise Modifying factor applied as per the Noise Policy) at the Coomalgah monitoring point. TCM

conducted subsequent noise assessment and no issues have been recorded in subsequent monitoring events.

- EPL M7.3 – blast monitoring location did not align with the previous version of the licence. This has been reported in previous annual returns. This has now been addressed in the variation EPL12365 approved in January 2020.
- EPL M2.1 and M2.2 – Monitoring Point 28 – ambient air monitor. This is considered a technical non-compliance due to downtime (0.4%) during periodic maintenance, equipment repair or calibration activities.
- EPL M2.1 and M7.2 – Point N2 – portable noise monitor. Technical non-compliance due to downtime (0.4%) during periodic maintenance, equipment repair or calibration.
- EPL M2.1 and M4.1 – Point W1 – weather monitoring point. Technical non-compliance due to downtime (0.1%) during periodic maintenance, equipment repair or calibration activities.

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

3.7 Mining Lease

Tarrawonga Coal Mine lies within the mining leases (ML) 1579, 1685, 1693 and 1749 issued to Tarrawonga Coal Pty Ltd.

One non-conformance was noted in relation to the site operating without an approved MOP for 10 days related to ML 1579. Mining Lease conditions and the summary of audit findings are provided in *Table 3.2* and *Appendix A*.

3.8 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;
- non-compliance assessed as 'low' have been colour coded yellow; and
- administrative non-compliance have been colour coded blue.

Table 3.2 Summary of 2020 Audit Findings

Item No	Assessment Requirement	Comment	Audit Classification	Response/Action						
Minister's Conditions of Approval PA 11_0047										
2.15	<p>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.</p> <p>Notes:</p> <ul style="list-style-type: none">Under Part 4A of the EP&A Act, the Proponent is required to obtain construction and occupation certificates for the proposed building works; andPart 8 of the EP&A Regulation sets out the requirements for the certification of the project.	A new maintenance workshop was constructed in 2020. The building has not been yet been commissioned. An occupation certificate has been sought from Narrabri Shire Council but not yet received.	C (Obs)	Ensure an occupation certificate is obtained prior to use.						
3.3	<p>Except for the noise-affected land in Table 1 the Proponent shall ensure that operational noise generated by the project does not exceed the criteria in Table 2 at any residence on privately-owned land.</p> <p>Table 2: Noise criteria dB(A)</p> <table><tr><th>Land</th><th>Day, Evening & Night LAeq(15 min)</th><th>Night LA1 (1 min)</th></tr><tr><td>All other privately-owned residences</td><td>35</td><td>45</td></tr></table> <p>Notes:</p> <ul style="list-style-type: none">Operational noise includes noise from the mining operations and the use of private roads (excluding the Kamilaroi Highway overpass) and rail spurs.Noise is to be measured in accordance with the relevant requirements, and exemptions (including certain meteorological conditions (also see condition 13)), of the NSW Industrial Noise Policy. <p>However, these noise criteria do not apply if the Proponent has an agreement with the owner/s of the relevant residence or land to generate higher noise levels, and the Proponent has advised the Department in writing of the terms of this agreement.</p>	Land	Day, Evening & Night LAeq(15 min)	Night LA1 (1 min)	All other privately-owned residences	35	45	<p>The following noise exceedance were reported during the audit period:</p> <p>7/6/19 – monitoring location TN2 on privately owned land. Day time exceedance of 42 dB recorded during quarterly attended noise monitoring.</p> <p>Following the reported exceedance TCM engaged an independent specialist to review the monitoring data and methods. It was concluded that the monitoring location was on the road not at the residence and SLR did not apply a factor accounting for this. No further exceedances have been recorded during subsequent attended noise monitoring events.</p> <p>The incident was reported to DPIE and EPA. DPIE confirmed EPA as the regulating authority. TCM is awaiting a response from EPA.</p>	NC	Comply with direction form EPA with regard to the reported noise exceedance.
Land	Day, Evening & Night LAeq(15 min)	Night LA1 (1 min)								
All other privately-owned residences	35	45								
3.8	<p>The Proponent, together with the owners of the Rocglen and Vickery coal mines, shall ensure that the noise generated on public roads by the Project and the other mines, does not exceed the criteria in Table 4 at any existing residence on privately-owned land.</p> <p>Table 4: Road traffic noise criteria dB(A)</p> <table><tr><th>Land</th><th>Day and Evening LAeq (15 hour)</th></tr><tr><td>All privately-owned residences</td><td>60</td></tr></table> <p>However, these criteria do not apply if the Proponent has a written agreement with the relevant landowner to exceed the criteria, and the Proponent has advised the Department in writing of the terms of this agreement.</p> <p>Note: Traffic noise generated by the Project is to be measured in accordance with the relevant procedures in the NSW Road Noise Policy.</p>	Land	Day and Evening LAeq (15 hour)	All privately-owned residences	60	<p>Noise monitoring is conducted at three locations along the haul road on a six monthly basis. No exceedances in noise criteria have been recorded during the audit period.</p> <p>Noise monitoring on the haul road was not carried out in the six month ending December 2017. TCM identified the issue and notified DPIE and conducted the monitoring in January 2018. DPIE issued an official caution on 23 March 2018.</p> <p>Monitoring has been conducted as required during 2018, 2019 and 2020.</p>	NC	Historic NC. No further action		
Land	Day and Evening LAeq (15 hour)									
All privately-owned residences	60									

Item No	Assessment Requirement	Comment	Audit Classification	Response/Action
3.15	The Proponent shall only carry out blasting on the site between 9 am and 5 pm Monday to Saturday inclusive. No blasting is allowed on Sundays, public holidays, or at any other time without the written approval of the Secretary.	Auditor reviewed blast monitoring records, no blasts occurred on Sunday. Time of blast was recorded to be 00:00:00 for approximately 60% of blasts in 2018. Time was not recorded for 4 blast events between 18 and 30 May 2020 and one blast even on 14 July 2020. All other blasts were recorded to be carried out between the hours 9am to 5pm.	C (Obs)	Ensure accurate blast times are recorded (Duplicate finding see EPL)
3.19	During mining operations on site, the Proponent shall: (a) implement best practice blasting management to: <ul style="list-style-type: none"> protect the safety of people and livestock in the surrounding area; protect public or private infrastructure/property in the surrounding area from any damage; minimise the dust and fume emissions of any blasting; and minimise blasting impacts on heritage items in the vicinity of the site; (b) co-ordinate the timing of blasting on site with the timing of blasting at other mines within the Leard Forest Mining Precinct to minimise the cumulative blasting impacts of the mines; and (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.	TCM has implemented a Blast Management Plan which complies with this condition. Communication with other mines is conducted by email. The distribution list also includes NSW Forestry. Notification email includes the scheduled time of the blast, location and map with the exclusion zone. Information regarding scheduled blasts is posted on the company website and on a board at the site entrance. TCM failed to notify a landowner for a blast on the 18 January 2018. DPIE was notified and issued a warning letter on 8 March 2018.	NC	Historic NC. No further action

Statement of Commitments

No non-compliances have been identified.

Environmental Protection Licence 12365

L2.1	For each monitoring/discharge point or utilisation area specified in the table/s below (by a point number), the concentration of a pollutant discharged at that point, or applied to that area, must not exceed the concentration limits specified for that pollutant in the table.	TCM had a wet weather discharge event from the EPL ID 3 (SB14) on 8 February 2020. Oil and grease was recorded to be 11mg/L exceeding the 10mg/L limit. The EPA issued a Show Cause on 25 June 2020 and TCM responded on 9 July 2020. TCM is awaiting a response from EPA. The TSS limit was exceeded at EPL ID 1, 2, 3 and 27. However, this was not considered an exceedance, as TSS limits do not apply after more than 38.3mm of rainfall in 5 days preceding the discharge. TCM had a discharge from EPL ID 1 on 21 October 2018. TSS value was recorded to be 3,970. However this was not considered an exceedance as TSS limits do not apply after more than 38.3mm of rainfall in 5 days preceding the discharge	NC	Comply with the direction from EPA with regard to the Show Cause.
L2.5	The Total Suspended Solids concentration limits specified for Points 1, 2, 3, 24, 26 and 27 may be exceeded for water discharged provided that: (a) the discharge occurs solely as a result of rainfall measured at the premises that exceeds 38.4 millimetres over any consecutive 5 day period immediately prior to the discharge occurring; and (b) all practical measures have been implemented to dewater all sediment dams within 5 days of rainfall such that they have sufficient capacity to store run off from a 38.4 millimetre, 5 day rainfall event. <i>Note: 38.4 mm equates to the 5 day 90%ile rainfall depth for Gunnedah sourced from Table 6.3a Managing Urban Stormwater: Soils and Construction Volume 1: 4th edition, March 2004.</i>	TCM had a wet weather discharge event from the EPL ID 3 (SB14) on 8 February 2020. The TSS limit was recorded to be 17,700 mg/L. However, this was not considered an exceedance, as TSS limits do not apply after more than 38.3mm of rainfall in 5 days preceding the discharge. The EPA undertook an investigation of the discharge from LDP 3 (SB14) on 8 February 2020. The EPA's investigation found that the discharge from SB14 may have polluted waters, in that: <ul style="list-style-type: none"> The discharge exceeded licence limit conditions for Oil and Grease, and 	NC	Duplicate NC. Refer to L2.1 above

Item No	Assessment Requirement					Comment	Audit Classification	Response/Action										
						<ul style="list-style-type: none">At the time of discharge the Licensee did not meet all the requirements of condition L2.5, in that it did not appear to take all reasonable steps to ensure that all sediment dams were emptied within 5 days of the last preceding rainfall event. Had this occurred, exceedance of the discharge limits may have been avoided.SB14 discharges into Goonbri Creek, which defined as waters under the Act. <p>Interview with Site Environmental Superintendent indicated TCM is awaiting a final response from the EPA regarding this matter.</p>												
L4.1	Noise generated at the premises must not exceed the noise limits in the table below. <table><tr><th>Locality and Location</th><th>Day- LAeq (15 minute)</th><th>Evening- LAeq (15 minute)</th><th>Night- LAeq (15 minute)</th><th>Night- LA1 (1 minute)</th></tr><tr><td>All other surrounding residences</td><td>35</td><td>35</td><td>35</td><td>45</td></tr></table>					Locality and Location	Day- LAeq (15 minute)	Evening- LAeq (15 minute)	Night- LAeq (15 minute)	Night- LA1 (1 minute)	All other surrounding residences	35	35	35	45	Quarterly attended noise monitoring resulted in one occurrence of the attended monitoring measurement of 42dB (including 2dB Noise Modifying factor applied as per the Noise Policy for Industry) at the 'Coomalgah' monitoring point. TCM engaged a separate noise specialist to take supplementary operational noise monitoring. The results showed that throughout the entire period there were no recorded noise non-compliances. TCM is awaiting feedback from EPA with regard to this incident.	NC	Comply with the directions of EPA.
Locality and Location	Day- LAeq (15 minute)	Evening- LAeq (15 minute)	Night- LAeq (15 minute)	Night- LA1 (1 minute)														
All other surrounding residences	35	35	35	45														
L4.4	Determining compliance To determine compliance: (a) with the Leq(15 minute) noise limits in the Noise Limits table, the noise measurement equipment must be located: (i). approximately on the property boundary, where any dwelling is situated 30 metres or less from the property boundary closest to the premises; or (ii). within 30 metres of a dwelling façade, but not closer than 3m, where any dwelling on the property is situated more than 30 metres from the property boundary closest to the premises; or, where applicable (iii). within approximately 50 metres of the boundary of a National Park or a Nature Reserve. (b) with the LA1(1 minute) noise limits in the Noise Limits table, the noise measurement equipment must be located within 1 metre of a dwelling façade. (c) with the noise limits in the Noise Limits table, the noise measurement equipment must be located: (i). at the most affected point at a location where there is no dwelling at the location; or (ii). at the most affected point within an area at a location prescribed by part (a) or part (b) of this condition.					Monitoring locations are stated in the Noise Management Plan (2015) and the quarterly monitoring reports. Auditor observed a sample of noise monitoring locations while on Site. Interview with Site Environmental Superintendent indicated that noise monitoring cannot be conducted within 30 m of the residence at night due to privacy concerns. TCM requested a variation to the EPL condition. The EPA advised that this standard condition could not be amended but acknowledged that this condition could not be met.	C (Obs)	Continue to discuss night-time noise monitoring locations with the EPA.										
L5.5	Blasting operations on the premises must only be carried out between the hours 9am to 5pm, Monday to Saturday, inclusive.					Auditor reviewed blast monitoring records, no blasts occurred on Sunday. Time of blast was recorded to be 00:00:00 for approximately 60% of blasts in 2018. Time was not recorded for 4 blast events between 18 and 30 May 2020 and one blast even on 14 July 2020. All other blasts were recorded to be carried out between the hours 9am to 5pm.	C (Obs)	Ensure accurate blast time is recorded.										

Item No	Assessment Requirement	Comment	Audit Classification	Response/Action												
O2.1	<p>All plant and equipment installed at the premises or used in connection with the licensed activity:</p> <p>(a) must be maintained in a proper and efficient condition; and</p> <p>(b) must be operated in a proper and efficient manner.</p>	<p>During the Site inspection, no observations were made of unmaintained or inappropriately operated equipment.</p> <p>The EPA undertook an investigation into the discharge of sediment laden water from sediment dam SB 14 on or around 8 February</p> <p>The EPA's investigation found that the discharge from SB14 may have polluted waters, in that the licensee appears to have failed to maintain and operate SB14 in a proper and efficient manner prior to the discharge on the 8 February 2020.</p> <p>Interview with Site Environmental Superintendent indicated TCM is awaiting a final response from the EPA regarding this matter.</p> <p>TCM is currently working with environmental professionals to implement water management improvements including staff training, risk assessment, and water pumps.</p>	NC	Duplicate NC. Refer L2.1												
M7.3	<p>For the purpose of conditions M7.1, M7.2 and M7.3 the monitoring locations are described as:</p> <table><tr><th>EPA ID No.</th><th>Description of Location</th></tr><tr><td>N2</td><td>Portable monitor</td></tr><tr><td>TN2</td><td>Within 30 metres of the 'Matong' property boundary as shown within 30 metres of the 'Matong' property boundary as shown on the map entitled "EPL12365 Monitoring Locations Onsite and Offsite" received by EPA on 14 October 2019 (DOC19/978674).</td></tr><tr><td>TN3</td><td>Within 30 metres of the residence on the property 'Barbers Lagoon' as shown on the map entitled "EPL12365 Monitoring Locations Onsite and Offsite" received by EPA on 14 October 2019 (DOC19/978674).</td></tr><tr><td>TN4</td><td>Within 30 metres of the residence on the property 'Bungalow' as shown on the map entitled "EPL12365 Monitoring Locations Onsite and Offsite" received by EPA on 14 October 2019 (DOC19/978674).</td></tr><tr><td>TB2</td><td>Within 30 metres of the residence on the property Coomalgah as shown on the map entitled "EPL12365 Monitoring Locations Onsite and Offsite" received by EPA on 14 October 2019 (DOC19/978674).</td></tr></table> <p><i>Note: Point N2 is a portable monitor enabling the monitor to be relocated to areas of potential greatest impact. The licensee is responsible to ensure that it is located at the most suitable location.</i></p> <p><i>Note: The location, frequency of monitoring and the parameters to be monitored may be varied by the EPA once the variability of the noise impact is established.</i></p>	EPA ID No.	Description of Location	N2	Portable monitor	TN2	Within 30 metres of the 'Matong' property boundary as shown within 30 metres of the 'Matong' property boundary as shown on the map entitled "EPL12365 Monitoring Locations Onsite and Offsite" received by EPA on 14 October 2019 (DOC19/978674).	TN3	Within 30 metres of the residence on the property 'Barbers Lagoon' as shown on the map entitled "EPL12365 Monitoring Locations Onsite and Offsite" received by EPA on 14 October 2019 (DOC19/978674).	TN4	Within 30 metres of the residence on the property 'Bungalow' as shown on the map entitled "EPL12365 Monitoring Locations Onsite and Offsite" received by EPA on 14 October 2019 (DOC19/978674).	TB2	Within 30 metres of the residence on the property Coomalgah as shown on the map entitled "EPL12365 Monitoring Locations Onsite and Offsite" received by EPA on 14 October 2019 (DOC19/978674).	<p>The auditor observed a sample of noise monitoring locations in the field. Monitoring locations are stated in the NMP and in quarterly monitoring reports.</p> <p>Interview with Site Environmental Superintendent indicated that noise monitoring cannot be conducted within 30 m of the residence at night. TCM requested a variation to the EPL condition, however, this was not approved.</p>	NC	Duplicate NC. Refer above
EPA ID No.	Description of Location															
N2	Portable monitor															
TN2	Within 30 metres of the 'Matong' property boundary as shown within 30 metres of the 'Matong' property boundary as shown on the map entitled "EPL12365 Monitoring Locations Onsite and Offsite" received by EPA on 14 October 2019 (DOC19/978674).															
TN3	Within 30 metres of the residence on the property 'Barbers Lagoon' as shown on the map entitled "EPL12365 Monitoring Locations Onsite and Offsite" received by EPA on 14 October 2019 (DOC19/978674).															
TN4	Within 30 metres of the residence on the property 'Bungalow' as shown on the map entitled "EPL12365 Monitoring Locations Onsite and Offsite" received by EPA on 14 October 2019 (DOC19/978674).															
TB2	Within 30 metres of the residence on the property Coomalgah as shown on the map entitled "EPL12365 Monitoring Locations Onsite and Offsite" received by EPA on 14 October 2019 (DOC19/978674).															

Item No	Assessment Requirement	Comment	Audit Classification	Response/Action
R4.1	A noise compliance assessment report must be submitted to the EPA within thirty (30) days of the completion of the quarterly noise monitoring. The assessment must be prepared by a suitably qualified and experienced acoustical consultant and include: (a) an assessment of compliance with noise limits detailed in the limit conditions of this licence; and (b) an outline of any management actions taken within the monitoring period to address any exceedances of the limits detailed in the limit conditions of this licence.	Last quarterly attended noise monitoring report for 2017 was not submitted within 30 days of completion of monitoring.	NC	Historic NC. No further action required.

Mining Licence 1579

2.3b	A Plan must be lodged with the Director-General:- (b) subsequently as appropriate prior to the expiry of any current Plan	TCM was required to update MOP amendment C to report on progress against rehabilitation undertakings by 1 April 2019. TCM submitted amendment D on 15 March 2019. Amendment D was approved on 12 April 2019. The DRG issued a caution letter to TCM for continuing operations between the 2 and 11 April 2019 without an approved MOP. Amendment E was lodged on the 19 December 2019.	NC	Historic NC. No further action required.
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Mining Licence 1693

12.	Prospecting operations must be carried out in a manner that does not cause or aggravate air pollution, water (including groundwater) pollution, soil contamination or erosion, unless otherwise authorised by a relevant approval, and in accordance with an accepted Mining Operations Plan.	Site inspection by the auditor identified that erosion and sediment control on-site is managed with basins and progressive rehabilitation. Water carts were observed working on site to manage dust. A dust suppressant is also utilised. An exceedance of the EPL limits for oil and grease was recorded for Dam SD14 on 8 February 2020. An uncontrolled discharge from Dam SD2 occurred on 10 February 2020 due to a wall failure after a significant rainfall event. A penalty notice was issued by the EPA. Areas of significant erosion were observed above SD14. TCM is currently working with environmental professionals to implement water management improvements including staff training, risk assessments and water pumps. Environmental Superintendent indicated that weather conditions monitored prior to blasts such that the blast is only carried out during conditions to prevent fugitive dust migration.	NC	Duplicate NC. Refer to EPL
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Mining Licence 1685

No non-compliances have been identified

Mining Licence 1749

No non-compliances have been identified

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)	Observations (Obs NC)	Observations (Obs C)
Statutory Instruments	7 (+4 duplicate)	-	3 (+1 duplicate)
Implementation of Plans	-	-	-

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**

TABLE A1 - PROJECT APPROVAL
Compliance with Project Approval 11_0047

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
SCHEDULE 2 – ADMINISTRATIVE CONDITIONS					
OBLIGATION TO MINIMISE HARM TO THE ENVIRONMENT					
1.	In addition to meeting the specific performance criteria established under this approval, 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.	Note	Noted	Note	
TERMS OF APPROVAL					
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. Notes: • The general layout of the project is shown in Appendix 2; and • The statement of commitments is reproduced in Appendix 4.	Note	Noted	Note	
3.	If there is any inconsistency between the above documents, the most recent document shall prevail to the extent of the inconsistency. However, the conditions of this approval shall prevail to the extent of any inconsistency.	Note	Noted	Note	
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 (including any stages of these documents); (b) any review, reports or audits commissioned by the Department regarding compliance with this consent; and (c) the implementation of any actions or measures contained in these documents.	Letter dated 25/10/19 responding to DPE request to consult on management plans Response to DPIE comments on Draft Water Management Plan – 29/1/20 Review of Blast Management Plan – email from DPIE	Evidence was provided that TCM complies with all requests made by the Secretary arising out of plan submission and review, audits of actions.	C	
LIMITS ON APPROVAL					
Mining Operations					
5.	The Proponent may carry out mining operations on the site until the end of December 2030. 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 MEG. Consequently, this approval will continue to apply in all other respects - other than the right to conduct mining operations - until the rehabilitation of the site and these additional undertakings have been carried out satisfactorily.	Note	Noted	Note	
Coal Extraction					
6.	The Proponent shall not extract more than 3 million tonnes of ROM coal from the site in any calendar year.	Annual Reviews 2017, 2018 and 2019 Coal haulage records Interview with Environment Superintendent	Data provided in the annual reviews, haulage records and by the Environment Superintendent confirms that the extracted tonnes are as below. 2020: 2.357M FY 20 2019: 2.26M 2018: 2.75M 2017: 1.87M	C	

TABLE A1 - PROJECT APPROVAL
Compliance with Project Approval 11_0047

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
Coal Transport					
7.	<p>For the period up until the commissioning of the Kamilaroi Highway overpass, the Proponent:</p> <p>(a) shall not transport more than 3 million tonnes of ROM coal from the site in any calendar year;</p> <p>(b) may transport up to 150,000 tonnes of this ROM coal from the site in any calendar year for direct distribution to domestic markets via the approved haulage route to the Kamilaroi Highway;</p> <p>(c) shall transport all remaining coal from the site to the Whitehaven CHPP via the approved haulage route;</p> <p>(d) shall, together with the owners of the Rocglen and Vickery coal mines, ensure that the cumulative haulage of coal along the approved haulage route does not exceed 4.0 million tonnes per year during calendar years 2017 and 2018; and</p> <p>(e) shall, together with the owners of the Rocglen and Vickery coal mines, ensure that the cumulative haulage of coal along the approved haulage route does not exceed 3.5 million tonnes each year during all other calendar years.</p> <p>Note: For the avoidance of doubt, the total amount of coal permitted to be transported from the site by road in any calendar year is 3 million tonnes.</p>	<p>Annual reviews 2017, 2018, 2019</p> <p>Coal haulage records</p> <p>Interview with Environment Superintendent</p>	<p>Data provided confirms that coal transported is as follows:</p> <p>Haulage route TCM to CHPP</p> <p>2019: 2.24M</p> <p>2018: 2.3M</p> <p>2017: 2.54M</p> <p>Direct distribution</p> <p>2019:105,907 t</p> <p>2018: 62,722 t</p> <p>2017: 69,252 t</p> <p>Combined Rocglen and Vickery</p> <p>2019: 2.89M (none from Vickery)</p> <p>2018: 3.5M (no haulage from V)</p> <p>2017: 3.99M (no haulage from Vickery)</p> <p>Coal rejects</p> <p>2019: 291,683</p> <p>2018: 558,563</p> <p>2017: 527,718</p>	C	
8.	<p>For the period following the commissioning of the Kamilaroi Highway overpass, the Proponent:</p> <p>(a) shall not transport more than 3 million tonnes of ROM coal from the site in any calendar year;</p> <p>(b) may transport up to 150,000 tonnes of this ROM coal from the site in any calendar year for direct distribution to domestic markets via the approved haulage route to the Kamilaroi Highway;</p> <p>(c) shall transport all remaining coal from the site to the Whitehaven CHPP via the approved haulage route and the Kamilaroi Highway overpass; and</p> <p>(d) shall, together with the owners of the Rocglen and Vickery coal mines, ensure that the cumulative haulage of coal along the approved haulage route does not exceed 4.5 million tonnes.</p> <p>Notes:</p> <ul style="list-style-type: none"> For the avoidance of doubt, the total amount of coal permitted to be transported from the site by road in any calendar year is 3 million tonnes. For the avoidance of doubt, while any ROM coal transported from the site to the Whitehaven CHPP must use the Kamilaroi Highway overpass (once commissioned), this requirement does not apply to the transport of ROM coal directly to domestic markets or the transport of gravel off site. 		Not triggered	NT	

TABLE A1 - PROJECT APPROVAL
Compliance with Project Approval 11_0047

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
9.	The Proponent shall only transport coal from the site or receive coal reject from the Whitehaven CHPP by truck between the hours of: (a) 6 am to 9.15 pm Monday to Friday; (b) 7 am to 5.15 pm Saturday; and (c) at no time on Sundays or public holidays.	Annual reviews 2017, 2018, 2019 Master Services Agreement for Supply of Road Haulage Services between WHC and Bis Industries Limited, commencement date 28 January 2014 Interview with Environmental Superintendent	Review of coal haulage records confirms that no coal is transported from the site or rejects transported to the site outside of the approved hours. The Master Services Agreement with the haulage contractor stipulates the transport times.	C	
10.	Within 6 months of the Boggabri rail spur line and Boggabri CHPP being commissioned, and every 2 years thereafter, the Proponent shall use all reasonable efforts to reach an agreement with the owners of the Boggabri coal mine to use this infrastructure to process and transport coal from the site, to the satisfaction of the Secretary. If an agreement is reached to transport coal via the Boggabri rail spur line, the Proponent: (a) shall not transport more than 3 million tonnes of ROM coal from the site in any calendar year; (b) may transport up to 150,000 tonnes of this ROM coal from the site in any calendar year for direct distribution to domestic markets by road via the approved haulage route to the Kamilaroi Highway; and (c) shall transport all remaining coal from the site via the Boggabri rail spur line.	Interview with Environmental Superintendent	Environment Superintendent confirmed that the Boggabri Rail Spur is not used.	NT	
Coal Rejects Transport					
10A.	The Proponent shall not receive more than 700,000 tonnes of coal rejects on the site in any calendar year	Annual Reviews 2017, 2018, 2019 Coal rejects haulage records	Records confirm that no more than 700,000 tonnes of coal reject is received at the site.	C	
10B.	The Proponent shall ensure all coal rejects transported to the site from the Whitehaven CHPP are transported via the approved haulage route.	Traffic Management Plan 2016	The Traffic Management Plan outlines the approved haulage route.	C	
Gravel extract and Transport					
11.	The Proponent shall not extract more than 90,000m3 of gravel from the site for distribution off-site in any calendar year.		Not triggered	NT	
12.	The Proponent may transport up to 90,000m3 of gravel from the site by truck in any calendar year. This gravel is to be transported from the site to the Kamilaroi Highway via the approved haulage route.		Not triggered	NT	
13.	The Proponent shall only transport gravel from the site by truck between 7 am and 6 pm Monday to Saturday.		Not triggered	NT	
SURRENDER OF EXISTING DEVELOPMENT CONSENT					
14.	By the end of December 2013, or as otherwise agreed by the Secretary, the Proponent shall surrender the existing development consent (DA-88-4-2005) for the Tarrawonga Coal Mine in accordance with Section 104A of the EP&A Act. Prior to the surrender of this development consent, the conditions of this approval shall prevail to the extent of any inconsistency with the conditions of the development consent.		Completed outside audit period	NT	

TABLE A1 - PROJECT APPROVAL
Compliance with Project Approval 11_0047

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
STRUCTURAL ADEQUACY					
15.	<p>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.</p> <p>Notes:</p> <ul style="list-style-type: none"> Under Part 4A of the EP&A Act, the Proponent is required to obtain construction and occupation certificates for the proposed building works; and Part 8 of the EP&A Regulation sets out the requirements for the certification of the project. 	Interview with Environment Superintendent and Group Superintendent - Environment	A new maintenance workshop was constructed in 2020. The building has not been yet been commissioned. An occupation certificate has been sought from Narrabri Shire Council but not yet received.	C (Obs)	Ensure an occupation certificate is obtained prior to use.
DEMOLITION					
16.	The Proponent shall ensure that all demolition work on site is carried out in accordance with Australian Standard AS 2601-2001: The Demolition of Structures, or its latest version.		Not triggered	NT	
PROTECTION OF PUBLIC INFRASTRUCTURE					
17.	<p>Unless the Proponent and the applicable authority agree otherwise, the Proponent shall:</p> <p>(a) repair, or pay the full costs associated with repairing, any public infrastructure that is damaged by the project; and</p> <p>(b) relocate, or pay the full costs associated with relocating, any public infrastructure that needs to be relocated as a result of the project.</p> <p>Note: This condition does not apply to any damage to roads caused as a result of general road usage.</p>		Not triggered	NT	
OPERATION OF PLANT AND EQUIPMENT					
18.	<p>The Proponent shall ensure that all the plant and equipment used on site, or to transport coal from the site, is:</p> <p>(a) maintained in a proper and efficient condition; and</p> <p>(b) operated in a proper and efficient manner.</p>	<p>Sentinex portal</p> <p>Dust monitor service report, 15/1/19</p> <p>Interview with Environment Superintendent</p> <p>Work order history</p>	<p>Environmental monitoring equipment is managed through the Sentinex portal. The equipment contractor manages the maintenance schedule and uploads reports to the portal.</p> <p>Plant and equipment are maintained by the site maintenance team of specialist suppliers.</p> <p>Work order history confirms that plant is maintained regularly.</p>	C	
UPDATING & STAGING STRATEGIES, PLANS OR PROGRAMS					
19.	<p>With the approval of the Secretary, the Proponent may submit any strategies, plans or programs required by this approval on a progressive basis.</p> <p>To ensure the strategies, plans or programs under the conditions of this approval are updated on a regular basis, the Proponent may at any time submit revised strategies, plans or programs to the Secretary for approval.</p> <p>With the agreement of the Secretary, the Proponent may prepare any revised strategy, plan or program without undertaking consultation with all parties under the applicable condition of this approval.</p> <p>Notes:</p> <ul style="list-style-type: none"> While any strategy, plan or program may be submitted on a progressive basis, the Proponent must ensure that the existing operations on site are covered by suitable strategies, plans or programs at all times. If the submission of any strategy, plan or program is to be staged, then the relevant strategy, plan or program must clearly describe the specific stage to which the strategy, plan or program applies, the 	EMP Review Record as at 23 July 2020	TCM maintains a register of plans required by the project which records the approval date. TCM has submitted a number of revisions of plans during the audit period. All plans reviewed were found to be appropriately approved. Where plans have been submitted to DPIE an approval is outstanding, the Site continues to utilise the last approved plan.	C	

TABLE A1 - PROJECT APPROVAL
Compliance with Project Approval 11_0047

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations						
	<i>relationship of this stage to any future stages, and the trigger for updating the strategy, plan or program.</i>										
20.	The Proponent shall continue to implement the existing strategies, plans or programs that apply to any development on site under project approval DA-88-4-2005, until they are replaced by an equivalent strategy, plan or program approved under this approval.		Outside audit period	NT							
COMMUNITY ENHANCEMENT											
21.	By the end of March 2013, unless otherwise agreed by the Secretary, the Proponent shall enter into a planning agreement with Council in accordance with: (a) Division 6 of Part 4 of the EP&A Act; and (b) the terms of the Proponent’s offer provided in Appendix 3.		Outside audit period	NT							
SCHEDULE 3 – ENVIRONMENTAL PERFORMANCE CONDITIONS											
ACQUISITION ON REQUEST											
1.	<p>Upon receiving a written request for acquisition from an owner of the privately-owned land listed in Table 1, the Proponent shall acquire the land in accordance with the procedures in conditions 8 and 9 of schedule 4.</p> <p><i>Table 1: Land subject to acquisition upon request</i></p> <table><tr><th>Acquisition Basis</th><th>Property ID</th></tr><tr><td>Noise & Air</td><td>44, 45, 49</td></tr><tr><td>Noise</td><td>43, 47</td></tr></table> <p>Notes:</p> <ul style="list-style-type: none">▪ <i>To interpret the locations referred to in Table 1 see the applicable figure(s) in Appendix 5.</i>▪ <i>Properties 43, 44 and 45 also have acquisition rights under the approval for the Boggabri coal mine, and/or the existing consent (DA 88-4-2005) for the Tarrawonga mine. The Proponent may acquire these properties on an equitable basis with the owner of the Boggabri mine.</i>▪ <i>For the purposes of acquisition under this condition, parcels of land that are in close proximity and operated as a single agricultural enterprise should be included as part of the land to be acquired. Where the Proponent and the owner(s) cannot agree on whether non-contiguous parcels of land should be included, either party may refer the matter to the Secretary for resolution. The Secretary’s decision as to the lands to be included for acquisition under the procedures in conditions 8 and 9 of Schedule 4 shall be final.</i>	Acquisition Basis	Property ID	Noise & Air	44, 45, 49	Noise	43, 47	<p>2017-6-2 Briefing Note – Templemore Acquisition</p> <p>Email from Lee Moore (Legal Counsel) confirming settlement on 12 October 2017</p> <p>Interview with Environment Superintendent</p>	Templemore property was acquired in October 2017. No other requests have been made or are in process.	C	
Acquisition Basis	Property ID										
Noise & Air	44, 45, 49										
Noise	43, 47										
ADDITIONAL NOISE AND/OR AIR QUALITY MITIGATION ON REQUEST											
2.	<p>Upon receiving a written request from the owner of any residence on the land listed in Table 1, the Proponent shall implement additional noise and/or air quality mitigation measures (such as double glazing, insulation, air filters, a first flush roof water drainage system and/or air conditioning) at the residence in consultation with the owner. These measures must be reasonable and feasible and directed towards reducing the noise and/or air quality impacts of the project on the residence.</p> <p>If within 3 months of receiving this request from the owner, the Proponent and the owner cannot agree on the measures to be implemented, or there is a dispute about the implementation of these measures, then either party may refer the matter to the Secretary for resolution.</p>		Not triggered	NT							

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations						
NOISE AND VIBRATIONS											
Noise Criteria											
3.	<p>Except for the noise-affected land in Table 1 the Proponent shall ensure that operational noise generated by the project does not exceed the criteria in Table 2Table 2 at any residence on privately-owned land.</p> <p>Table 2: Noise criteria dB(A)</p> <table><tr><th>Land</th><th>Day, Evening & Night LAeq(15 min)</th><th>Night LA1 (1 min)</th></tr><tr><td>All other privately-owned residences</td><td>35</td><td>45</td></tr></table> <p>Notes:</p> <ul style="list-style-type: none">Operational noise includes noise from the mining operations and the use of private roads (excluding the Kamilaroi Highway overpass) and rail spurs.Noise is to be measured in accordance with the relevant requirements, and exemptions (including certain meteorological conditions (also see condition 13)), of the NSW Industrial Noise Policy. <p>However, these noise criteria do not apply if the Proponent has an agreement with the owner/s of the relevant residence or land to generate higher noise levels, and the Proponent has advised the Department in writing of the terms of this agreement.</p>	Land	Day, Evening & Night LAeq(15 min)	Night LA1 (1 min)	All other privately-owned residences	35	45	<p>Report by Wilkinson Murray – September 2019</p> <p>Interview with Environment Superintendent</p>	<p>The following noise exceedance were reported during the audit period:</p> <p>7/6/19 – monitoring location TN2 on privately owned land. Day time exceedance of 42 dB recorded during quarterly attended noise monitoring.</p> <p>Following the reported exceedance TCM engaged an independent specialist to review the monitoring data and methods. It was concluded that the monitoring location was on the road not at the residence and SLR did not apply a factor accounting for this. No further exceedances have been recorded during subsequent attended noise monitoring events.</p> <p>The incident was reported to DPIE and EPA. DPIE confirmed EPA as the regulating authority. TCM is awaiting a response from EPA.</p>	NC	<p>Comply with direction form EPA with regard to the reported noise exceedance.</p>
Land	Day, Evening & Night LAeq(15 min)	Night LA1 (1 min)									
All other privately-owned residences	35	45									
Noise Acquisition Requirements - Residences											
4.	<p>If the owner(s) of a privately-owned residence, that is not listed in Table 1, have reason to believe that operational noise from the project is causing the criteria in Table 2 to be exceeded at the residence, the owner(s) can request an independent noise impact assessment for the residence. The request shall be made in writing to the Secretary. If the Secretary considers that a noise impact assessment is warranted, then the Proponent shall commission the assessment.</p> <p>If the noise impact assessment determines that the noise generated by the project causes sustained exceedances, or is likely to cause sustained exceedances, of the criteria in Table 2, the owner(s) can make a written request to the Proponent for one of the following:</p> <p>(a) mitigation (such as double glazing, insulation and air conditioning) at the residence in consultation with the owner(s). These measures must be reasonable and feasible and directed towards reducing the noise impacts of the project on the residence. If within 3 months of receiving this request from the owner(s), the Proponent and owner(s) cannot agree on the measures to be implemented, or there is a dispute about the implementation of these measures, then either party may refer the matter to the Secretary for resolution; or</p> <p>(b) acquisition of the residence and land in accordance with the procedures in conditions 8 and 9 of Schedule 4.</p> <p>Upon receiving a written request from the owner(s), the Proponent must undertake whichever option has been requested by the owner(s).</p> <p>However, this condition does not apply if the Proponent has an agreement with the owner(s) of the relevant residence to generate higher noise levels, and the Proponent has advised the Department in writing of the terms of this agreement.</p> <p>Notes:</p> <p>1. For the purposes of this condition a privately-owned residence is defined as a residence not owned by a mining company that: is regularly occupied; or is an existing residence that is not regularly</p>	<p>Interview with Environment Superintendent</p>	<p>No requests have been received.</p>	NT							

TABLE A1 - PROJECT APPROVAL
Compliance with Project Approval 11_0047

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<p><i>occupied but for which a valid development consent exists; or is a proposed residence for which a development application has been lodged with the relevant authority prior to the date of this approval.</i></p> <p><i>2. For the purposes of acquisition under this condition, parcels of land that are in close proximity and operated as a single agricultural enterprise should be included as part of the land to be acquired. Where the Proponent and the owner(s) cannot agree on whether non-contiguous parcels of land should be included, either party may refer the matter to the Secretary for resolution. The Secretary's decision as to the lands to be included for acquisition under the procedures in conditions 8 and 9 of Schedule 4 shall be final.</i></p> <p><i>3. The noise assessment must be undertaken by a suitably qualified, experienced and independent person, whose appointment has been approved by the Secretary and include either: a. sufficient monitoring at the affected residence to allow for assessment of the impacts under a range of meteorological conditions (including adverse conditions) likely to be experienced at the residence; or b. sufficient monitoring to allow reliable prediction of the likely impacts under the range of meteorological conditions (including adverse conditions) likely to be experienced at the residence.</i></p> <p><i>4. Monitoring should be conducted in accordance with the requirements of the NSW Industrial Noise Policy.</i></p> <p><i>5. Where predictions of likely impacts is to be used, either in substitution for, or in conjunction with, direct measurement of noise impacts at the residence, it must be based on sufficient monitoring data to provide a reliable estimate of the impacts (including under adverse meteorological conditions) and be derived using standard noise modelling techniques accepted by the EPA.</i></p> <p><i>6. The Proponent shall ensure that the requested noise impact assessment is submitted to the Secretary within 3 months of the Secretary's decision that the assessment was warranted. The Proponent shall also provide a copy of the assessment to the owner(s) of the residence at the same time it is submitted to the Secretary.</i></p>				
Noise Acquisition Requirements - Land					
5.	<p>If the owner(s) of land containing a privately owned residence, which is not listed in Table 1, have reason to believe that operational noise from the project is causing noise levels to exceed 40 dB(A) $L_{Aeq(15\text{ min})}$ over more than 25% of that land, the owner(s) can request an independent noise impact assessment for the land. The request shall be made in writing to the Secretary. If the Secretary considers that a noise impact assessment is warranted, then the Proponent shall commission the assessment.</p> <p>If the noise impact assessment determines that the noise generated by the project causes sustained exceedances, or is likely to cause sustained exceedances, of the 40 dBA criteria, the owner(s) can make a written request to the Proponent for acquisition of the residence and land in accordance with the procedures in conditions 8 and 9 of Schedule 4.</p> <p>Upon receiving a written request from the owner(s), the Proponent must purchase the residence and land in accordance with the procedures in conditions 8 and 9 of Schedule 4. However, this condition does not apply if the Proponent has an agreement with the owner(s) of the relevant residence to generate higher noise levels, and the Proponent has advised the Department in writing of the terms of this agreement.</p> <p><i>Note: The notes to condition 4 of this Schedule also apply to this condition.</i></p>	Interview with Environmental Superintendent	No requests for an independent noise impact assessment have been received.	NT	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations				
Cumulative Noise Criteria									
6.	<p>Except for the land listed in Table 1, the Proponent shall ensure that the operational noise generated by the project combined with the noise generated by other mines does not exceed the criteria in Table 3 at any residence on privately-owned land.</p> <p><i>Table 3: Cumulative noise criteria dB(A) L_{Aeq} (period)</i></p> <table><tr><th>Land</th><th>Day/Evening/Night L_{Aeq} (period)</th></tr><tr><td>All privately-owned land</td><td>40</td></tr></table> <p>Notes:</p> <ul style="list-style-type: none">Cumulative noise is to be measured in accordance with the relevant requirements, and exemptions (including certain meteorological conditions (also see condition 13)), of the NSW Industrial Noise Policy.Operational noise includes noise from the mining operations and the use of private roads (excluding the Kamilaroi Highway overpass) and rail spurs.	Land	Day/Evening/Night L _{Aeq} (period)	All privately-owned land	40	Quarterly attended noise monitoring Monthly monitoring reports Complaints register	One reported exceedance of noise criteria as referenced in Condition 3 above. No complaints related to noise have been received during the audit period.	C	
Land	Day/Evening/Night L _{Aeq} (period)								
All privately-owned land	40								
Cumulative Noise Acquisition Requirements									
7.	<p>If the owner(s) of a privately-owned residence, which is not listed in Table 1, reasonably believes that the noise limits in Table 3 are being exceeded at the residence and that the exceedance is caused by operational noise from the project and one or more other mines (including use of private roads or rail spurs), the owner(s) can request an independent noise impact assessment for the residence. The request shall be made in writing to the Secretary. If the Secretary considers that a noise impact assessment is warranted, then the Proponent shall commission the assessment.</p> <p>Where the noise impact assessment determines that the cumulative noise generated by the project combined with the noise from the other mine(s) causes, or is likely to cause, sustained exceedances of the criteria in Table 3, then the owner(s) can make a written request to the Proponent for one of the following:</p> <p>(a) mitigation (such as double glazing, insulation and air conditioning) at the residence in consultation with the owner(s). These measures must be reasonable and feasible and directed towards reducing the noise impacts of the project on the residence. If within 3 months of receiving this request from the owner(s), the Proponent and owner(s) cannot agree on the measures to be implemented, or there is a dispute about the implementation of these measures, then either party may refer the matter to the Secretary for resolution; or</p> <p>(b) acquisition of the residence and land in accordance with the procedures in conditions 8 and 9 of Schedule 4.</p> <p>Upon receiving a written request from the owner(s), the Proponent must undertake whichever option has been requested by the owner(s).</p> <p>However, this condition does not apply if the Proponent has an agreement with the owner(s) of the relevant residence to generate higher noise levels, and the Proponent has advised the Department in writing of the terms of this agreement.</p> <p>The Proponent may seek to recover an equitable share of the costs incurred from the other mines contributing to the cumulative impact. Unless otherwise agreed between the mines, the proportional contributions should be based on expert analysis of the monitoring results to assess relative contribution to the impact. In the event of a dispute between the mines the Proponent, or one of the contributing mines, may submit the matter to the Secretary for resolution. The Secretary’s decision shall be final.</p>	Interview with Environmental Superintendent	No requests have been received during the audit period.	C					

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations				
	<p><i>Notes:</i></p> <p>1. The notes to condition 4 of this Schedule also apply to this condition.</p> <p>2. The noise impact assessment shall include assessment of the relative contribution of the mines to the impact at the residence.</p>								
Road Traffic Noise Criteria									
8.	<p>The Proponent, together with the owners of the Rocglen and Vickery coal mines, shall ensure that the noise generated on public roads by the Project and the other mines, does not exceed the criteria in Table 4 at any existing residence on privately-owned land.</p> <p><i>Table 4: Road traffic noise criteria dB(A)</i></p> <table><tr><th>Land</th><th>Day and Evening LAeq (15 hour)</th></tr><tr><td>All privately-owned residences</td><td>60</td></tr></table> <p>However, these criteria do not apply if the Proponent has a written agreement with the relevant landowner to exceed the criteria, and the Proponent has advised the Department in writing of the terms of this agreement.</p> <p><i>Note: Traffic noise generated by the Project is to be measured in accordance with the relevant procedures in the NSW Road Noise Policy.</i></p>	Land	Day and Evening LAeq (15 hour)	All privately-owned residences	60	<p>Wilkinson Murray Report, 22 July 2020 – measurement done on 12 and 26 June 2020</p> <p>Caution letter 23 March 2018</p>	<p>Noise monitoring is conducted at three locations along the haul road on a six monthly basis. No exceedances in noise criteria have been recorded during the audit period.</p> <p>Noise monitoring on the haul road was not carried out in the six month ending December 2017. TCM identified the issue and notified DPIE and conducted the monitoring in January 2018. DPIE issued an official caution on 23 March 2018.</p> <p>Monitoring has been conducted as required during 2018, 2019 and 2020.</p>	NC	Historic NC. No further action
Land	Day and Evening LAeq (15 hour)								
All privately-owned residences	60								
Attenuation of Plant									
9.	<p>In the event that the Proponent and the Council or a Government agency, other than the Department, cannot agree on the specification or requirements of this approval, the matter may be referred by either party to the Director-General for resolution, whose determination of the disagreement shall be final and binding on the parties.</p>	<p>Note</p>	<p>Noted</p>	<p>Note</p>					
10.	<p>The Proponent shall:</p> <p>(a) conduct an annual testing program of the plant on site;</p> <p>(b) restore the effectiveness of any attenuation if it is found to be defective; and</p> <p>(c) report on the results of any testing and/or attenuation work within the Annual Review.</p>	<p>Annual Reviews 2017, 2018, 2019</p> <p>SPL testing conducted 26-28 November 2019, report dated 30 January 2020</p> <p>Todoroski Air Science Report, 25 March 2020</p> <p>Interview with Environmental Superintendent</p>	<p>Annual SPL testing is conducted as required and results reported in the Annual Review.</p> <p>New Hitachi trucks have noise attenuation which was tested prior to commission (Todoroski Report).</p> <p>No other plant has noise attenuation.</p>	C					
Operating Conditions									
11.	<p>The Proponent shall:</p> <p>(a) implement best management practice to minimise all operational, low frequency, road and rail traffic noise levels associated with the project;</p> <p>(b) operate a comprehensive on-site noise management system that uses a combination of predictive meteorological forecasting and real-time noise monitoring data to guide the day to day planning of mining operations and the implementation of both proactive and reactive noise mitigation measures to ensure compliance with the relevant conditions of this approval;</p> <p>(c) maintain the effectiveness of noise suppression equipment on plant at all times and ensure defective plant is not operationally used until fully repaired;</p> <p>(d) ensure that noise attenuated plant is deployed preferentially in locations near to sensitive receivers;</p>	<p>Noise Management Plan</p> <p>Letter from DPIE dated 6/6/17 approving the BTM noise strategy</p> <p>Review of Sentinex records, recorded alarms and actions.</p>	<p>Real time noise monitoring is conducted to support control of operations. Noise monitoring is logged to the Sentinel portal which generates alarms if noise levels are exceeded. Audio and visual observations form the monitoring stations can be reviewed in the event of an alarm to determine actions in accordance with the TARP.</p> <p>Meteorological forecasting is presented at the daily planning meeting and real time monitoring logged in Sentinex.</p> <p>Noise attenuation is on Hitachi tricks – see above.</p> <p>The Leard Forest Mining Precinct Noise Strategy has been approved.</p>	C					

TABLE A1 - PROJECT APPROVAL
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No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<p>(e) minimise the noise impacts of the project during meteorological conditions under which the noise limits in this approval do not apply (see condition 13);</p> <p>(f) ensure that project related trains on the Boggabri spur line only use locomotives that are approved to operate on the NSW rail network in accordance with the noise limits in ARTC's EPL (No. 3142);</p> <p>(g) use its best endeavours to ensure that project-related rolling stock supplied by service providers on the Boggabri rail spur line is designed, constructed and maintained to minimise noise; and</p> <p>(h) co-ordinate the noise management on site with the noise management at other mines within the Leard Forest Mining Precinct, to minimise the cumulative noise impacts of these mines,</p> <p>to the satisfaction of the Secretary.</p>		The Boggabri rail spur is not use,		

Noise Management Plan

12.	<p>The Proponent shall prepare and implement a Noise Management Plan for the project to the satisfaction of the Secretary. This plan must: (a) be prepared in consultation with the EPA, and be submitted to the Secretary for approval by the end of May 2013;</p> <p>(b) describe the measures that would be implemented to ensure:</p> <ul style="list-style-type: none"> best management practice is being employed; the noise impacts of the project are minimised during meteorological conditions under which the noise limits in this approval do not apply; and compliance with the relevant conditions of this approval; <p>(c) describe the proposed noise management system in detail;</p> <p>(d) include a risk/response matrix to codify operational responses to varying levels of risk resulting from weather conditions and specific mining activities;</p> <p>(e) include commitments to provide summary reports and specific briefings at CCC meetings on issues arising from noise monitoring;</p> <p>(f) describe the measures that would be implemented to ensure the noise impacts from the operation of the Kamilaroi Highway overpass are minimised as far as practicable;</p> <p>(g) include a monitoring program that:</p> <ul style="list-style-type: none"> uses attended monitoring to evaluate the performance of the project against all noise criteria in this approval, including a minimum of four days attended monitoring per quarter at locations agreed to by the Secretary, or more regularly where required; uses real-time monitoring to support the proactive and reactive noise management system on site; includes monitoring of inversion strength at an appropriate sampling rate to determine compliance with noise limits; evaluates and reports on the effectiveness of the noise management system on site; provides for the annual validation of the noise model for the project (including the tenth percentile methodology); and <p>(h) includes a Leard Forest Mining Precinct Noise Management Strategy, that has been prepared in consultation with other coal mines in the Precinct, to minimise the cumulative noise impacts of all mines within the Precinct, and includes:</p> <ul style="list-style-type: none"> a description of the measures that would be implemented to ensure that the noise management of the mines is properly co-ordinated to ensure compliance with the relevant noise criteria; a suitable monitoring network for the precinct; 	<p>Noise Management Plan, 29 December 2014</p> <p>Annual Reviews 2017, 2018, 2019</p> <p>TCM Real Time Monitoring Procedure</p> <p>Validation report by Todoroski 20/3/20</p> <p>CCC Meeting minutes</p> <p>Interview with Environmental Superintendent</p>	<p>ERM review records of the activation of the TARP included in the NMP to very implementation. When a noise alarm is raised from the monitoring station the OCE records the alarm in a log book. The log records the time the alarm was received and what action was taken, including any review of audio or cameras at the monitoring station.</p> <p>Results of noise monitoring are provided to the CCC. Validation of noise monitoring is undertaken on an annual basis and summarised in the Annual Review. The NMP was revised to include the Leard Forest Precinct (BTM) noise strategy in October 2019 and a response was received from DPIE on 3 February 2020. The NMP will be further reviewed following this audit and to incorporate the DPIE feedback.</p>	C	
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TABLE A1 - PROJECT APPROVAL
Compliance with Project Approval 11_0047

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<ul style="list-style-type: none">protocols for data sharing; andprocedures for identifying and apportioning the source/s and contribution/s to cumulative noise impacts for the operating mines and other sources, using the noise and meteorological monitoring network and appropriate investigative tools. <p><i>Note: The Leard Forest Mining Precinct Noise Management Strategy can be developed in stages and will need to be subject to ongoing review dependent upon the determination and commencement of other mining projects in the area.</i></p>				

Noise Measurement

13.	Where conditions in this approval refer to measurement of noise within the context of the NSW Industrial Noise Policy the inversion class to be applied to the project is Class G. However, the Proponent may undertake an investigation to determine whether a proposal for change in this classification could be considered for approval by the Secretary. Any such investigation must be conducted in consultation with the EPA and be conducted by a suitably qualified person whose appointment has been endorsed by the EPA and approved by the Secretary. The report and recommendation must be submitted to the EPA for endorsement prior to submission to the Secretary. If the Secretary is satisfied that the recommendation is reasonable, then the Secretary may amend the inversion class applying to the project under this approval.		No request has been made during the audit period.	NT	
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BLASTING

Blasting Criteria

14.	<p>The Proponent shall ensure that blasting does not cause any exceedance of the criteria in Table 5.</p> <table><tr><th>Location</th><th>Airblast overpressure (dB(Lin Peak))</th><th>Ground vibration (mm/s)</th><th>Allowable exceedance</th></tr><tr><td rowspan="2">Residence on privately-owned land</td><td>120</td><td>10</td><td>0%</td></tr><tr><td>115</td><td>5</td><td>5% of the total number of blasts over a period of 12 months</td></tr><tr><td>All public infrastructure</td><td>-</td><td>50 <i>(or a limit determined by the structural design methodology in AS 2187.2-2006, or its latest version, to the satisfaction of the Secretary)</i></td><td>0%</td></tr></table> <p>However, these criteria do not apply if the Proponent has a written agreement with the relevant owner or infrastructure provider/owner to exceed the limits in Table 5, and the Proponent has advised the Department in writing of the terms of this agreement.</p>	Location	Airblast overpressure (dB(Lin Peak))	Ground vibration (mm/s)	Allowable exceedance	Residence on privately-owned land	120	10	0%	115	5	5% of the total number of blasts over a period of 12 months	All public infrastructure	-	50 <i>(or a limit determined by the structural design methodology in AS 2187.2-2006, or its latest version, to the satisfaction of the Secretary)</i>	0%	<p>Environmental blast monitoring records 2017-2020</p> <p>Email from TCM to Boaggabri and Maules Creek dated 1/5/20 for blast schedule on 6/5/20</p>	<p>ERM has reviewed the blast monitoring records for the audit period. Exceedances of the 115dB criteria have been recorded in each year but are below the 5% allowable exceedance that is reportable.</p> <p>Communication with other mines is conducted by email. The distribution list also includes NSW Forestry. Notification email includes the scheduled time of the blast, location and map with the exclusion zone.</p>	C	
Location	Airblast overpressure (dB(Lin Peak))	Ground vibration (mm/s)	Allowable exceedance																	
Residence on privately-owned land	120	10	0%																	
	115	5	5% of the total number of blasts over a period of 12 months																	
All public infrastructure	-	50 <i>(or a limit determined by the structural design methodology in AS 2187.2-2006, or its latest version, to the satisfaction of the Secretary)</i>	0%																	

TABLE A1 - PROJECT APPROVAL
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No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
Blasting Hours					
15.	The Proponent shall only carry out blasting on the site between 9 am and 5 pm Monday to Saturday inclusive. No blasting is allowed on Sundays, public holidays, or at any other time without the written approval of the Secretary.	Environmental blast monitoring records 2017-2020	Auditor reviewed blast monitoring records, no blasts occurred on Sunday. Time of blast was recorded to be 00:00:00 for approximately 60% of blasts in 2018. Time was not recorded for 4 blast events between 18 and 30 May 2020 and one blast even on 14 July 2020. All other blasts were recorded to be carried out between the hours 9am to 5pm.	C (Obs)	Ensure accurate blast times are recorded (Duplicate finding see EPL)
Blasting Frequency					
16.	The Proponent may carry out a maximum of: (a) 1 blast a day; unless an additional blast is required following a blast misfire; and (b) 4 blasts a week, averaged over a calendar year, for the project. This condition does not apply to blasts that generate ground vibration of 0.5 mm/s or less at any residence on privately-owned land, or to blasts required to ensure the safety of the mine or its workers. <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>	Environmental blast monitoring records 2017-2020	Blasting has been conducted in accordance with this condition.	C	
Property Inspections					
17.	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 his/her land, or to have a previous property inspection report updated, then within 2 months of receiving this request the Proponent shall: (a) commission a suitably qualified, experienced and independent person, whose appointment is acceptable to both parties, to: (b) establish the baseline condition of any buildings and/or structures on the land, or update the previous property inspection report; and (c) identify any measures that should be implemented to minimise the potential blasting impacts of the project on these buildings and/or structures; and (d) give the landowner a copy of the new or updated property inspection report. If there is a dispute over the selection of the suitably qualified, experienced and independent person, or the Proponent or landowner disagrees with the findings of the independent property investigation, either party may refer the matter to the Secretary for resolution.		Not triggered	NT	
Property Investigations					
18.	If any owner of privately-owned land within 2 kilometres of blasting operations, or any other landowner nominated by the Secretary, claims that the buildings and/or structures on his/her land have been damaged as a result of blasting on site, then within 2 months of receiving this claim in writing from the landowner, the Proponent shall: (a) commission a suitably qualified, experienced and independent person, whose appointment is acceptable to both parties, to investigate the claim; and (b) give the landowner a copy of the property investigation report.		Not triggered	NT	

TABLE A1 - PROJECT APPROVAL
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No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<p>If this independent property investigation confirms the landowner's claim, and both parties agree with these findings, then the Proponent shall repair the damages to the satisfaction of the Secretary.</p> <p>If there is a dispute over the selection of the suitably qualified, experienced and independent person, or the Proponent or landowner disagrees with the findings of the independent property investigation, either party may refer the matter to the Secretary for resolution.</p>				
Operating Conditions					
19.	<p>During mining operations on site, the Proponent shall:</p> <p>(a) implement best practice blasting management to:</p> <ul style="list-style-type: none"> protect the safety of people and livestock in the surrounding area; protect public or private infrastructure/property in the surrounding area from any damage; minimise the dust and fume emissions of any blasting; and minimise blasting impacts on heritage items in the vicinity of the site; <p>(b) co-ordinate the timing of blasting on site with the timing of blasting at other mines within the Leard Forest Mining Precinct to minimise the cumulative blasting impacts of the mines; and</p> <p>(c) operate a suitable system to enable the public to get up-to-date information on the proposed blasting schedule on site, to the satisfaction of the Secretary.</p>	<p>Blast Management Plan, December 2014</p> <p>Incident register</p> <p>Interview with Environmental Superintendent</p>	<p>TCM has implemented a Blast Management Plan which complies with this condition.</p> <p>Communication with other mines is conducted by email. The distribution list also includes NSW Forestry. Notification email includes the scheduled time of the blast, location and map with the exclusion zone.</p> <p>Information regarding scheduled blasts is posted on the company website and on a board at the site entrance.</p> <p>TCM failed to notify a landowner for a blast on the 18 January 2018. DPIE was notified and issued a warning letter on 8 March 2018.</p>	NC	Historic NC. No further action
20.	<p>The Proponent shall not undertake blasting on-site within 500 metres of:</p> <p>(a) any public road without the approval of Council; or</p> <p>(b) any land outside of the site not owned by the Proponent, unless:</p> <ul style="list-style-type: none"> the Proponent has a written agreement with the relevant landowner to allow blasting to be carried out closer to the land, and the Proponent has advised the Department in writing of the terms of this agreement; or the Proponent has: demonstrated that the blasting can be carried out closer to the land without compromising the safety of the people or livestock on the land, or damaging the buildings and/or structures on the land; and 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, to the satisfaction of the Secretary. 	<p>Email 8/5/20 for blasting that day</p> <p>WHC-PLN-TAR Road Closure pPan</p>	<p>Council is informed of road closures by email in accordance with the Road Closure Procedure. Notification of blasts is posted on the company website.</p> <p>Blasting has not been carried out within 500 metres of land outside the site not owned by TCM.</p>	C	
Blast Management Plan					
21.	<p>The Proponent shall prepare and implement a Blast Management Plan for the project to the satisfaction of the Secretary. This plan must: (a) be submitted to the Secretary for approval by the end of May 2013;</p> <p>(b) be prepared in consultation with the EPA and interested members of the local community who would potentially be affected by blasting;</p> <p>(c) propose and justify any alternative ground vibration limits for public infrastructure in the vicinity of the site;</p> <p>(d) describe the measures that would be implemented to ensure:</p>	<p>Blast Management Plan, December 2014</p>	<p>The currently approved Blast Management Plan complies with these conditions.</p> <p>An update of the BMP including the Leard Forest Mining Precinct Blast Management Strategy was submitted to DPIE in 2018. Feedback was provided and the plan resubmitted in October 2019. TCM is awaiting feedback on the plan and will resubmit a further review in September 2020 following completion of this IEA.</p>	C	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations									
	<ul style="list-style-type: none">best management practice is being employed; andcompliance with the relevant conditions of this approval; (e) include a road closure protocol for blasting within 500 metres of a public road, that has been prepared in consultation with Council; (f) include a specific blast fume management protocol to demonstrate how emissions will be minimised, including risk management strategies if blast fumes are generated; (g) include a monitoring program for evaluating blasting performance, which includes: <ul style="list-style-type: none">compliance with the applicable criteria; andminimising blast fume emissions; and (h) include a Leard Forest Mining Precinct Blast Management Strategy, that has been prepared in consultation with other mines within the Leard Forest Mining Precinct, to minimise cumulative blasting impacts. <i>Note: The Leard Forest Mining Precinct Blast Management Strategy can be developed in stages, and will need to be subject to ongoing review dependent upon the determination of and commencement of other mining projects in the area.</i>													
AIR QUALITY AND GREENHOUSE GAS														
Odour														
22.	Unless otherwise authorised by an EPL, the Proponent shall ensure that no offensive odours are emitted from the site, as defined under the POEO Act.		Not triggered											
Greenhouse Gas Emissions														
23.	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.	TCM Air Quality and Greenhouse Gas Management Plan, 28 Januray 2015	The currently approved AQGHGMP describes the measures to minimise release of greenhouse gases from the project.											
Air Quality Criteria														
24.	<p>The Proponent shall ensure that all reasonable and feasible avoidance and mitigation measures are implemented so that particulate matter emissions generated by the project do not cause exceedances of the criteria in Table 6, Table 7 and Table 8 at any residence on privately-owned land or on more than 25 percent of any privately-owned land.</p> <p>The assessment acknowledges that it may not be reasonable and feasible to prevent exceedance of the PM₁₀ criteria in Table 6 at property 45 and exceedance of the criteria in Table 7 in year 16 at property 49. (To interpret the property locations referred to see the applicable figure(s) in Appendix 5.)</p> <p><i>Table 5: Long-term criteria for particulate matter</i></p> <table><tr><th>Pollutant</th><th>Averaging Period</th><th>^d Criterion</th></tr><tr><td>Total suspended particulate (TSP) matter</td><td>Annual</td><td>a 90 µg/m3</td></tr><tr><td>Particulate matter < 10 µm (PM10)</td><td>Annual</td><td>a 30 µg/m3</td></tr></table>	Pollutant	Averaging Period	^d Criterion	Total suspended particulate (TSP) matter	Annual	a 90 µg/m3	Particulate matter < 10 µm (PM10)	Annual	a 30 µg/m3	Annual Reviews 2017, 2018, 2019 Environmental monitoring reports TCM Incident and Exceedance Register	<p>The following exceedances of air quality criteria were reported during the audit period:</p> <p>2020: Seven exceedances of PM10 recorded January to March 2020. All considered to be extraordinary events.</p> <p>2019: TCM’s HVAS at property ‘Coomalgah’ measured twenty two (22) exceedances of the 24 hour average limit over 12 months. Investigations showed that all those elevated PM10 levels were not mine related. DPIE acknowledged that there were 18 out of 22 exceedances recorded on days that regional air quality alerts were issued by Office of Environment Heritage (OEH) or days of ‘extraordinary event’ therefore advised criterion could be excluded from the annual averaging calculation. It is noted that this decision contradicts the response to the 2018 exceedances detailed below.</p>	C	
Pollutant	Averaging Period	^d Criterion												
Total suspended particulate (TSP) matter	Annual	a 90 µg/m3												
Particulate matter < 10 µm (PM10)	Annual	a 30 µg/m3												

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations														
	<p><i>Table 6: Short-term criteria for particulate matter</i></p> <table><tr><th><i>Pollutant</i></th><th><i>Averaging Period</i></th><th><i>^d Criterion</i></th></tr><tr><td>Particulate matter < 10 µm (PM10)</td><td>24 hour</td><td>a 50 µg/m3</td></tr></table> <p><i>Table 7: Long-term criteria for deposited dust</i></p> <table><tr><th><i>Pollutant</i></th><th><i>Averaging Period</i></th><th><i>Maximum increase in deposited dust level</i></th><th><i>Maximum total deposited dust level</i></th></tr><tr><td>c Deposited dust</td><td>Annual</td><td>b 2 g/m2/month</td><td>a 4 g/m2/month</td></tr></table> <p><i>Notes to Table 6, Table 7 and Table 8:</i></p> <p><i>a Total impact (ie incremental increase in concentrations due to the project plus background concentrations due to all other sources);</i></p> <p><i>b Incremental impact (ie incremental increase in concentrations due to the project on its own);</i></p> <p><i>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.</i></p> <p><i>d Excludes extraordinary events such as bushfires, prescribed burning, dust storms, sea fog, fire incidents or any other activity agreed by the Secretary.</i></p> <p><i>"Reasonable and feasible avoidance measures" includes, but is not limited to, the operational requirements in conditions 28 and 29 to develop and implement a real-time air quality management system that ensures operational responses to the risks of exceedance of the criteria.</i></p>	<i>Pollutant</i>	<i>Averaging Period</i>	<i>^d Criterion</i>	Particulate matter < 10 µm (PM10)	24 hour	a 50 µg/m3	<i>Pollutant</i>	<i>Averaging Period</i>	<i>Maximum increase in deposited dust level</i>	<i>Maximum total deposited dust level</i>	c Deposited dust	Annual	b 2 g/m2/month	a 4 g/m2/month		<p>2018: TCM received a Warning Letter regarding failure ‘to adequately calculate long term air quality impact by excluding fifteen (15) PM10 HVAS results from the 2018 Annual Review because they were determined not to be mine related.</p> <p>No exceedances recorded during the audit period have been determined as mine-related.</p>		
<i>Pollutant</i>	<i>Averaging Period</i>	<i>^d Criterion</i>																	
Particulate matter < 10 µm (PM10)	24 hour	a 50 µg/m3																	
<i>Pollutant</i>	<i>Averaging Period</i>	<i>Maximum increase in deposited dust level</i>	<i>Maximum total deposited dust level</i>																
c Deposited dust	Annual	b 2 g/m2/month	a 4 g/m2/month																
Mine-Specific Air Quality Criteria																			
25.	<p>The Proponent shall ensure that particulate matter emissions generated by the project do not exceed the criteria listed in Table 9 at any residence on privately-owned land or on more than 25 percent of any privately-owned land, except on property 49 in year 16.</p> <p><i>Table 8: Short-term criteria for particulate matter</i></p> <table><tr><th><i>Pollutant</i></th><th><i>Averaging Period</i></th><th><i>Criterion</i></th></tr><tr><td>Particulate matter < 10 µm (PM10)</td><td>24 hour</td><td>50 µg/m3</td></tr></table> <p><i>Note:</i></p> <p><i>As provided by the EP&A Act, the criterion in Table 8 may be amended to a more stringent criterion in an EPL, after the first review of the EPL under section 78 of the POEO Act.</i></p>	<i>Pollutant</i>	<i>Averaging Period</i>	<i>Criterion</i>	Particulate matter < 10 µm (PM10)	24 hour	50 µg/m3	<p>Annual Reviews 2017, 2018, 2019 Environmental monitoring reports TCM Incident and Exceedance Register</p>	<p>No exceedances recorded during the audit period have been determined as mine-related.</p>	C									
<i>Pollutant</i>	<i>Averaging Period</i>	<i>Criterion</i>																	
Particulate matter < 10 µm (PM10)	24 hour	50 µg/m3																	
Air Quality Acquisition Criteria																			
26.	<p>If particulate matter emissions generated by the project exceed the criteria, or contribute to an exceedance of the relevant cumulative criteria, in Table 10, Table 11 or Table 12, at any residence on privately-owned land or on more than 25 percent of any privately-owned land, then upon receiving a written request for acquisition from the landowner the Proponent shall acquire the land in accordance with the procedures in conditions 8 and 9 of schedule 4.</p>		<p>No requests have been received in respect of this condition.</p>	NT															

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations																										
	<p>Table 9: Long term land acquisition criteria for particulate matter</p> <table><tr><th>Pollutant</th><th>Averaging period</th><th>^d Criterion</th></tr><tr><td>Total suspended particulate (TSP) matter</td><td>Annual</td><td>^a 90 µg/m3</td></tr><tr><td>Particulate matter < 10 µm (PM10)</td><td>Annual</td><td>^a 30 µg/m3</td></tr></table> <p>Table 10: Short term land acquisition criteria for particulate matter</p> <table><tr><th>Pollutant</th><th>Averaging period</th><th>^d Criterion</th></tr><tr><td>Particulate matter < 10 µm (PM10)</td><td>24 hour</td><td>^a 150 µg/m3</td></tr><tr><td>Particulate matter < 10 µm (PM10)</td><td>24 hour</td><td>^b 50 µg/m3</td></tr></table> <p>Table 11: Long term land acquisition criteria for deposited dust</p> <table><tr><th>Pollutant</th><th>Averaging period</th><th>Maximum increase in deposited dust level</th><th>Maximum total deposited dust level</th></tr><tr><td>^c Deposited dust</td><td>Annual</td><td>^b 2 g/m2/month</td><td>^a 4 g/m2/month</td></tr></table> <p>Notes to Table 10, Table 11 and Table 12:</p> <p>a Total impact (ie incremental increase in concentrations due to the project plus background concentrations due to all other sources);</p> <p>b Incremental impact (ie incremental increase in concentrations due to the project on its own);</p> <p>c Deposited dust is to be assessed as insoluble solids as defined by Standards Australia, AS/NZS 3580.10.1:2003: Methods for Sampling and Analysis of Ambient Air - Determination of Particulate Matter - Deposited Matter - Gravimetric Method;</p> <p>d Excludes extraordinary events such as bushfires, prescribed burning, dust storms, sea fog, fire incidents, or any other activity agreed by the Secretary.</p>	Pollutant	Averaging period	^d Criterion	Total suspended particulate (TSP) matter	Annual	^a 90 µg/m3	Particulate matter < 10 µm (PM10)	Annual	^a 30 µg/m3	Pollutant	Averaging period	^d Criterion	Particulate matter < 10 µm (PM10)	24 hour	^a 150 µg/m3	Particulate matter < 10 µm (PM10)	24 hour	^b 50 µg/m3	Pollutant	Averaging period	Maximum increase in deposited dust level	Maximum total deposited dust level	^c Deposited dust	Annual	^b 2 g/m2/month	^a 4 g/m2/month				
Pollutant	Averaging period	^d Criterion																													
Total suspended particulate (TSP) matter	Annual	^a 90 µg/m3																													
Particulate matter < 10 µm (PM10)	Annual	^a 30 µg/m3																													
Pollutant	Averaging period	^d Criterion																													
Particulate matter < 10 µm (PM10)	24 hour	^a 150 µg/m3																													
Particulate matter < 10 µm (PM10)	24 hour	^b 50 µg/m3																													
Pollutant	Averaging period	Maximum increase in deposited dust level	Maximum total deposited dust level																												
^c Deposited dust	Annual	^b 2 g/m2/month	^a 4 g/m2/month																												
Mine-owned Land																															
27.	<p>The Proponent shall ensure that all reasonable and feasible avoidance and mitigation measures are implemented so that particulate matter emissions generated by the project do not exceed the criteria in Table 6, Table 7 and Table 8 at any occupied residence on any mine-owned land (including land owned by adjacent mines), unless:</p> <p>(a) the tenant and/or landowner has been notified of any health risks in accordance with the notification requirements under schedule 4 of this approval;</p> <p>(b) the tenant on project-related land can terminate the tenancy agreement without penalty, subject to giving reasonable notice, and the Proponent uses its best endeavours to provide assistance with relocation and sourcing of alternative accommodation;</p> <p>(c) air mitigation measures such as air filters, a first flush roof water drainage system and/or air conditioning) are installed at the residence, if requested by the tenant and landowner (where owned by another mine other than the Proponent);</p> <p>(d) particulate matter air quality monitoring is undertaken to inform the tenant and landowner of potential health risks; and</p>	<p>Letter to tenants with attached NSW Health and Minerals Council Mine Dust information sheet and limits on air quality for the project</p> <p>Interview with Environmental Superintendent</p>	<p>Tenants/landowners have been provided with appropriate information in relation to the health risks associated with mine dust.</p> <p>TCM has received no requests for dust mitigation measures and no tenancies have been terminated during the audit period.</p>	C																											

TABLE A1 - PROJECT APPROVAL
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No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	(e) monitoring data is presented to the tenant in an appropriate format, for a medical practitioner to assist the tenant in making an informed decision on the health risks associated with occupying the property, to the satisfaction of the Secretary.				
Operating Conditions					
28.	<p>The Proponent shall:</p> <p>(a) implement best practice air quality management practices on site, including all reasonable and feasible measures to minimise odour, fume and dust emissions of the project;</p> <p>(b) operate a comprehensive air quality management system that uses a combination of predictive meteorological forecasting, predictive and real time air dispersion modelling and real-time air quality monitoring data to guide the day-to-day planning of mining operations and implementation of both proactive and reactive air quality mitigation measures to ensure compliance with the relevant conditions of this approval;</p> <p>(c) manage PM_{2.5} levels in accordance with any requirements of an EPL;</p> <p>(d) minimise the air quality impacts of the project during adverse meteorological conditions and extraordinary events (see note d under Table 8);</p> <p>(e) minimise any visible air pollution generated by the project;</p> <p>(f) minimise the surface disturbance of the site generated by the project; and</p> <p>(g) co-ordinate the air quality management on site with the air quality management at other mines within the Leard Forest Mining Precinct to minimise the cumulative air quality impacts of the mines, to the satisfaction of the Secretary.</p>	<p>Air Quality and Greenhouse Gas Management Plan</p> <p>Interview with Environmental Superintendent</p> <p>Site observations</p> <p>Complaints register</p>	<p>The measures to be employed are described in the AQGHGMP.</p> <p>The auditor review real time dust and meteorological data available in Sentinex.</p> <p>There have been no complaints received related to dust since April 2018.</p> <p>The auditor sighted use of the water cart on the haul road to control dust.</p> <p>TCM uses a dust suppressant product where needed to control dust from stockpiles and exposed areas.</p>	C	
Air Quality and Greenhouse Gas Management Plan					
29.	<p>The Proponent shall prepare and implement an Air Quality and Greenhouse Gas Management Plan for the project to the satisfaction of the Secretary. This plan must:</p> <p>(a) be prepared in consultation with the EPA and be submitted to the Secretary for approval by the end of May 2013;</p> <p>(b) describe the measures that would be implemented to ensure:</p> <ul style="list-style-type: none"> ▪ best practice management is being employed; ▪ the air quality impacts of the project are minimised during adverse meteorological conditions and extraordinary events; and ▪ compliance with the relevant conditions of this approval; <p>(c) describe the proposed air quality management system;</p> <p>(d) include a risk/response matrix to codify mine operational responses to varying levels of risk resulting from weather conditions and specific mining activities;</p> <p>(e) include commitments to provide summary reports and specific briefings at CCC meetings on issues arising from air quality monitoring;</p> <p>(f) include an air quality monitoring program that: • uses a combination of real-time monitors and supplementary monitors to evaluate the performance of the project;</p> <ol style="list-style-type: none"> i. adequately supports the proactive and reactive air quality management system; ii. includes PM_{2.5} monitoring; iii. includes monitoring of occupied mine-owned residences and residences on the air quality affected land in Table 1, subject to the agreement of the tenant and/or landowner; iv. evaluates and reports on the effectiveness of the air quality management system; 	<p>AQGGMP January 2015</p> <p>Adverse weather condition TARP</p> <p>BTM AQMS May 2017</p> <p>Daily report from OEH air quality index</p> <p>OCE Log for 3 September 2019, 5 September 2019 and 9 September 2910</p>	<p>The currently approved AQGHGMP complies with this condition.</p> <p>Air quality index report is discussed at the 9 am planning meeting to advise of any known regional air quality issues such as bushfires or dust storms.</p> <p>The TARP is activated when wind speed is above a certain speed.</p> <p>The auditor reviewed the OCE logbook for activation of the TARP and noted appropriate actions were taken, including:</p> <ul style="list-style-type: none"> • Travel speed reduced on 3/9/19 • Truck speed reduced on 5/9/19 • work ceased and machines parked up on 9/9/19 	C	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<p>v. includes sufficient random audits of operating responses to real time air quality management systems to determine the ongoing effectiveness of these responses in maintaining the project within the relevant criteria in this Schedule and the requirements of conditions 24 and 25, above;</p> <p>vi. includes a protocol for determining any exceedences of the relevant conditions in this approval; and</p> <p>vii. systems and processes to ensure that all mines are managed to achieve their air quality criteria;</p> <p>viii. a shared environmental monitoring network and data sharing protocol;</p> <p>ix. control monitoring site(s) to provide real time data on background air quality levels (ie not influenced by mining in the Leard Forest Mining Precinct and representative of regional air quality);</p> <p>x. a shared predictive and real time air dispersion model covering the Leard Forest Mining Precinct to be used for assessment of cumulative impacts, optimising location of the shared real time monitoring network, validation of air predictions and optimising mitigation measures; and</p> <p>xi. procedures for identifying and apportioning the source/s and contribution/s to cumulative air impacts for both mines and other sources, using the air quality and meteorological monitoring network and appropriate investigative tools such as modelling of post incident plume dispersion, dual synchronised monitors and chemical methods of source apportionment (where possible).</p> <p>(g) includes a Leard Forest Mining Precinct Air Quality Management Strategy that has been prepared in consultation with other coal mines in the Precinct to minimise the cumulative air quality impacts of all mines within the Precinct, that includes:</p> <p>i. systems and processes to ensure that all mines are managed to achieve their air quality criteria;</p> <p>ii. a shared environmental monitoring network and data sharing protocol;</p> <p>iii. control monitoring site(s) to provide real time data on background air quality levels (ie not influenced by mining in the Leard Forest Mining Precinct and representative of regional air quality);</p> <p>iv. a shared predictive and real time air dispersion model covering the Leard Forest Mining Precinct to be used for assessment of cumulative impacts, optimising location of the shared real time monitoring network, validation of air predictions and optimising mitigation measures; and</p> <p>v. procedures for identifying and apportioning the source/s and contribution/s to cumulative air impacts for both mines and other sources, using the air quality and meteorological monitoring network and appropriate investigative tools such as modelling of post incident plume dispersion, dual synchronised monitors and chemical methods of source apportionment (where possible).</p> <p>Notes:</p> <ul style="list-style-type: none"> ▪ The requirement for regionally based control sites can be further reviewed if a regional air monitoring network is implemented and operated by the EPA as recommended in the draft Strategic Regional Land Use Plan for New England North West. ▪ The Leard Forest Mining Precinct Air Quality Management Strategy can be developed in stages and will need to be subject to ongoing review dependent upon the determination of and commencement of other mining projects in the area. ▪ The management plan should be consistent with the EPA's guidance on Best Management Practice reporting and Reactive Particulate Management Strategies. 				

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No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
METEOROLOGICAL MONITORING					
30.	For the life of the project, the Proponent shall ensure that there is a meteorological station 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> , unless a suitable alternative is approved by the Secretary following consultation with the EPA.	Email from EPA dated 23/1/20 re. specifying a 90% data capture rate	TCM operates a meteorological station that is capable of continuous real-time measurements. A previous IEA recorded a non-compliance due to equipment downtime resulting in real-time measurement not being available at all times. The EPA has subsequently confirmed that there is no expectation of 100% data capture and a 90% data capture is acceptable.	C	
SOIL AND WATER					
	<i>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.</i>				
Water Supply					
31.	The Proponent shall ensure that it has sufficient water for all stages of the project, and if necessary, adjust the scale of mining operations on site to match its available water supply, to the satisfaction of the Secretary.	Water Management Plan, March 2020	A water balance is included in Section 4 of the WMP. The TCM is covered by four Water Sharing Plans (WSPs) including the following: <ul style="list-style-type: none"> Namoi Unregulated and Alluvial (commenced 2012); Upper Namoi and Lower Namoi Regulated River (replaced 2016); NSW Murray-Darling Basin Porous Rock Groundwater (commenced 2012); and Upper and Lower Namoi Groundwater (commenced 2006). Water is also trucked from other WHC sites as approved through Mod 8 of the Project Approval.	C	
Compensatory Water Supply					
32.	The Proponent shall provide a compensatory water supply to any owner of privately-owned land whose water supply is adversely and directly impacted (other than a negligible impact) as a result of the project, in consultation with DPIE Water, and to the satisfaction of the Secretary. The compensatory water supply measures must provide an alternative long-term supply of water that is equivalent to the loss attributed to the project. Equivalent water supply should be provided (at least on an interim basis) within 24 hours of the loss being identified. If the Proponent and the landowner cannot agree on the measures to be implemented, or there is a dispute about the implementation of these measures, then either party may refer the matter to the Secretary for resolution. If the Proponent is unable to provide an alternative long-term supply of water, then the Proponent shall provide alternative compensation to the satisfaction of the Secretary.	Interview with Environmental Superintendent	Not triggered	NT	
Surface Water Discharges					
33.	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.		Refer to Table A2 – EPL Compliance		

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations								
Goonbri Creek Diversion and Low Permeability Barrier – Performance Objectives													
34.	<p>The Proponent shall ensure that the project has no greater environmental consequences than predicted in the EA and complies with the performance objectives in Table 13, to the satisfaction of the Secretary.</p> <p>Table 12: Goonbri Creek and alluvial aquifer performance objectives</p> <table><tr><th>Feature</th><th>Objective</th></tr><tr><td>Goonbri Creek and the Upper Namoi alluvial aquifer</td><td>No more than negligible environmental consequences to the alluvial aquifer, including:<ul style="list-style-type: none">negligible change in groundwater levels;negligible leakage through low permeability barrier;negligible change in groundwater quality; andnegligible impact to other groundwater users.</td></tr><tr><td>Goonbri Creek diversion</td><td>Hydraulically and geomorphologically stable (including the low permeability barrier) Negligible change to off-site flooding characteristics (including flood levels, velocities and flood storage capacity) Riparian vegetation, habitat, energy management and dissipation, bedload transport, biophysical maintenance and pool holding capacity that is the same or better than existed prior to mining Revegetation of the riparian zone focused on establishment of self-sustaining vegetation characteristic of the Bracteate Honeymyrtle community (as proposed in the EA)</td></tr><tr><td>Low permeability barrier, including associated flood bund</td><td>Hydraulically and geomorphologically stable The effectiveness of the Low Permeability Barrier shall be at least 10-8 metres/second Negligible change to off-site flooding characteristics (including flood levels, velocities and flood storage capacity) Provides suitable protection for flood events up to and including the Probable Maximum Flood.</td></tr></table>	Feature	Objective	Goonbri Creek and the Upper Namoi alluvial aquifer	No more than negligible environmental consequences to the alluvial aquifer, including: <ul style="list-style-type: none">negligible change in groundwater levels;negligible leakage through low permeability barrier;negligible change in groundwater quality; andnegligible impact to other groundwater users.	Goonbri Creek diversion	Hydraulically and geomorphologically stable (including the low permeability barrier) Negligible change to off-site flooding characteristics (including flood levels, velocities and flood storage capacity) Riparian vegetation, habitat, energy management and dissipation, bedload transport, biophysical maintenance and pool holding capacity that is the same or better than existed prior to mining Revegetation of the riparian zone focused on establishment of self-sustaining vegetation characteristic of the Bracteate Honeymyrtle community (as proposed in the EA)	Low permeability barrier, including associated flood bund	Hydraulically and geomorphologically stable The effectiveness of the Low Permeability Barrier shall be at least 10-8 metres/second Negligible change to off-site flooding characteristics (including flood levels, velocities and flood storage capacity) Provides suitable protection for flood events up to and including the Probable Maximum Flood.	Interview with Environmental Superintendent	Not triggered. The Goonbri Creek Diversion and Low Permeability have not been implemented during the audit period.	NT	
Feature	Objective												
Goonbri Creek and the Upper Namoi alluvial aquifer	No more than negligible environmental consequences to the alluvial aquifer, including: <ul style="list-style-type: none">negligible change in groundwater levels;negligible leakage through low permeability barrier;negligible change in groundwater quality; andnegligible impact to other groundwater users.												
Goonbri Creek diversion	Hydraulically and geomorphologically stable (including the low permeability barrier) Negligible change to off-site flooding characteristics (including flood levels, velocities and flood storage capacity) Riparian vegetation, habitat, energy management and dissipation, bedload transport, biophysical maintenance and pool holding capacity that is the same or better than existed prior to mining Revegetation of the riparian zone focused on establishment of self-sustaining vegetation characteristic of the Bracteate Honeymyrtle community (as proposed in the EA)												
Low permeability barrier, including associated flood bund	Hydraulically and geomorphologically stable The effectiveness of the Low Permeability Barrier shall be at least 10-8 metres/second Negligible change to off-site flooding characteristics (including flood levels, velocities and flood storage capacity) Provides suitable protection for flood events up to and including the Probable Maximum Flood.												
Goonbri Creek Diversion and Flood Bund Concept Design Plan													
35.	<p>The Proponent shall prepare and implement a Goonbri Creek Diversion and Flood Bund Concept Design Plan, to the satisfaction of the Secretary. The plan must:</p> <p>(a) be prepared in consultation with DPIE Water, BCD and the LLS;</p> <p>(b) be submitted to the Secretary for approval by December 2016;</p> <p>(c) set out the vision statement for the creek diversion;</p> <p>(d) assess the surface water and groundwater quality, ecology, hydrological (including flooding) and geomorphic baseline conditions within the creek;</p>	Interview with Environmental Superintendent	Not triggered	NT									

TABLE A1 - PROJECT APPROVAL
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No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<p>(e) set out the construction program for the creek diversion and LPB, describing how the work would be staged, and integrated with mining operations;</p> <p>(f) describe the revegetation program for the creek diversion and the use of a range of suitable native species;</p> <p>(g) establish the water quality, ecology, hydrological (including flooding) and geomorphic performance and completion criteria for the creek diversion and LPB based on the assessment of baseline conditions; and</p> <p>(h) be revised in consultation with DPIE Water, BCD and the LLS, and resubmitted for approval by the Secretary in response to the findings of the detailed technical design required in condition 36 and the Monitoring and Management Plan in condition 38.</p>				
Goonbri Creek Diversion and Low Permeability Barrier – Design and Construction					
36.	<p>The Proponent shall design the Goonbri Creek diversion and LPB to the satisfaction of DPIE Water and the Secretary. The detailed designs must:</p> <p>(a) be designed by a suitably qualified and experienced expert/s;</p> <p>(b) be endorsed by DPIE Water and approved by the Secretary prior to the commencement of any works or construction on the Goonbri Creek diversion and LPB;</p> <p>(c) be generally in accordance with the conceptual designs in the EA (and depicted in Appendix 6), and applicable Australian Standards (including AS 3798–2007);</p> <p>(d) include detailed design, construction and engineering specifications, performance criteria and completion criteria;</p> <p>(e) demonstrate that the design would achieve the relevant performance objectives and criteria; and</p> <p>(f) demonstrate the LPB design would remain effective over an appropriate lifespan and would withstand mining operations, geological and weather events, decay and corrosive attack – including biological attack.</p>	Interview with Environmental Superintendent	Not triggered	NT	
37.	<p>The Proponent shall:</p> <p>(a) construct the Goonbri Creek diversion and LPB prior to undertaking any mining operations within 200 metres of the Goonbri Creek alluvium, and at least 5 years prior to the planned mining in the alluvium; and</p> <p>(b) within 2 months of the construction of the Goonbri Creek diversion and LPB, submit an as-executed report to the Secretary and DPIE Water, certified by a practising engineer, confirming that the diversion and barrier have been constructed:</p> <ul style="list-style-type: none"> in accordance with the concept design in the EA, applicable Australian Standards (including AS 3798-2007) and the approved design (see condition 36 above); and in a manner that achieves the performance objectives in Table 13. <p>Notes:</p> <ul style="list-style-type: none"> <i>The Goonbri Creek alluvium, diversion, conceptual low permeability barrier and flood bunds are shown in Appendix 6.</i> <i>The diversion and low permeability barrier may be constructed on a staged basis. In this case, the reports required under conditions 36 and 37 shall be submitted for each stage.</i> 	Interview with Environmental Superintendent	Not triggered	NT	
Goonbri Creek Diversion and Low Permeability Barrier – Monitoring and Management Plan					
38.	<p>The Proponent shall prepare and implement a Goonbri Creek Diversion and Low Permeability Barrier Monitoring and Management Plan to the satisfaction of the DPIE Water and the Secretary. The plan must: (a) be prepared by a suitably qualified and experienced expert/s;</p>	Interview with Environmental Superintendent	Not triggered	NT	

TABLE A1 - PROJECT APPROVAL
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No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<p>(b) be endorsed by the DPIE Water and approved to the Secretary prior to commencement of any works or construction on the Goonbri Creek diversion and LPB;</p> <p>(c) describe the monitoring and maintenance procedures to be implemented and the scheduling of these procedures;</p> <p>(d) demonstrate the monitoring system would be capable of timely detection of any failure or deficiency in the LPB and any impacts on Goonbri Creek and its associated alluvium;</p> <p>(e) describe the contingency measures that would be implemented in the event of a failure or deficiency in the LPB, or other impact on Goonbri Creek and its associated alluvium; and</p> <p>(f) identify the entity that would take responsibility for the future liabilities and costs associated with the long-term monitoring and maintenance of the LPB, flood bund, void and pit lake, and demonstrate that this entity's security and finances would be assured in the long term.</p>				
Water Management Plan					
39.	<p>The Proponent shall prepare and implement a Water Management Plan for the project to the satisfaction of the Secretary. This plan must:</p> <p>(a) be prepared in consultation with BCD , DPIE Water and LLS, by suitably qualified and experienced person/s whose appointment has been approved by the Secretary,</p> <p>(b) be submitted to the Secretary for approval by the end of May 2013; and</p> <p>(c) in addition to the standard requirements for management plans (see condition 3 of schedule 5), include a:</p> <p>(i) <u>Site Water Balance</u>, that includes:</p> <ul style="list-style-type: none"> details of: <ul style="list-style-type: none"> sources and security of water supply, including contingency for future reporting periods, incorporating commitments for minimising trucking of off-site water as identified in MOD8; water use and management on site; any off-site water discharges; reporting procedures, including the preparation of a site water balance for each calendar year; a program to validate the surface water model, including monitoring discharge volumes from the site and comparison of monitoring results with modelled predictions; and describes the measures that would be implemented to minimise clean water use on site; <p>(ii) <u>Surface Water Management Plan</u>, that includes:</p> <ul style="list-style-type: none"> detailed baseline data on surface water flows and quality in the water-bodies that could potentially be affected by the project; detailed baseline data on soils within the irrigation area; detailed baseline data on hydrology across the downstream drainage system of the Namoi River floodplain from the mine site to the Namoi River, including Barbers Lagoon and The Slush Holes; detailed description of the water management system on site, including the: <ul style="list-style-type: none"> clean water diversion systems; erosion and sediment controls (mine water system); mine water management systems including irrigation areas; discharge limits in accordance with EPL requirements; and 	<p>TCM Water Management Plan, March 2020</p> <p>BTM Complex Water Strategy June 2019</p> <p>Letter of approval for BTM Water Strategy dated 14 June 2019</p> <p>Dam inspection record 24 January 2020</p> <p>Groundwater monitoring records</p> <p>Quarterly Surface water monitoring results spreadsheet</p> <p>OCE Dam inspection reports</p> <p>CCC meeting minutes</p>	<p>The currently approved Water Management Plan complies with this condition.</p> <p>The BTM Complex Water Strategy was approved on 14 June 2019 and incorporated into the TCM WMP.</p> <p>The Auditor reviewed records of dam inspections and confirms these are undertaken in accordance with the WMP. Any remedial works are discussed with the Production Supervisor and escalate to INX reporting database.</p> <p>A review of the Site's dams has recently been completed by Aurecon. Recommended improvements to be implemented include:</p> <ul style="list-style-type: none"> Weekly checklist for completion by dewatering team Individual training for those who complete dam inspections <p>Groundwater monitoring is undertaken in accordance with the WMP. Water level is measured every quarter and a full suite of criteria including pH, EC, temperature on a six monthly basis.</p> <p>All monitoring is presented and discussed with CCC members and reported in the Annual Review.</p> <p>Quarterly surface water monitoring is undertaken when there is flow in the Creeks.</p>	C	

TABLE A1 - PROJECT APPROVAL
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No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<ul style="list-style-type: none"> - water storages; • detailed plans, including design objectives and performance criteria for: <ul style="list-style-type: none"> - design and management of final voids; - design and management for the emplacement of reject materials, sodic and dispersible soils and acid or sulphate generating materials; - the Goonbri Creek diversion and low permeability barrier; - reinstatement of drainage lines on the rehabilitated areas of the site; and - control of any potential water pollution from the rehabilitated areas of the site; - performance criteria for the following, including trigger levels for investigating any potentially adverse impacts associated with the project: <ul style="list-style-type: none"> - the water management system; - soils within the irrigation area; - downstream surface water quality; - downstream flooding impacts, including flood impacts due to the flood bunds required for the project; and - stream and riparian vegetation health, including the Namoi River and its tributaries including Barbers Lagoon and The Slush Holes; • a program to monitor and assess: <ul style="list-style-type: none"> - the effectiveness of the water management system; - soils within the irrigation area; - the effectiveness of the Goonbri Creek diversion and flood bunds (see conditions 34-38); - surface water flows and quality in the watercourses that could be affected by the project; and - downstream flooding impacts; • reporting procedures for the results of the monitoring program; and • a plan to respond to any exceedences of the performance criteria, and mitigate and/or offset any adverse surface water impacts of the project; <p><u>(iii) Groundwater Management Plan</u>, that includes:</p> <ul style="list-style-type: none"> • detailed baseline data of groundwater levels, yield and quality in the region, and privately-owned groundwater bores including a detailed survey/schedule of groundwater dependent ecosystems (including stygo-fauna), that could be affected by the project; • detailed plans, including design objectives and performance criteria, for the design and management of: <ul style="list-style-type: none"> - the proposed final void; and - coal reject and potential acid forming material emplacement; • groundwater assessment criteria including trigger levels for investigating any potentially adverse groundwater impacts; • a program to monitor and assess: <ul style="list-style-type: none"> - groundwater inflows to the open cut mining operations; - the effectiveness of the LPB; - the seepage/leachate from the LPB, water storages, emplacements and the final void; - interconnectivity between the alluvial and bedrock aquifers; - background changes in groundwater yield/quality against mine-induced 				

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<p>changes;</p> <ul style="list-style-type: none">- the impacts of the project on:<ul style="list-style-type: none">o regional and local (including alluvial) aquifers;o groundwater supply of potentially affected landowners;o groundwater dependent ecosystems (including potential impacts on stygo-fauna) and riparian vegetation;• a program to validate the groundwater model for the project, including an independent review of the model every 3 years, and comparison of monitoring results with modelled predictions; and• a plan to respond to any exceedences of the performance criteria; and <u>Leard Forest Mining Precinct Water Management Strategy</u>, that has been prepared in consultation with other mines within the precinct to:<ul style="list-style-type: none">- minimise the cumulative water quality impacts of the mines;- review opportunities for water sharing/water transfers between mines;- co-ordinate water quality monitoring programs as far as practicable;- undertake joint investigations/studies in relation to complaints/exceedences of trigger levels where cumulative impacts are considered likely; and• co-ordinate modelling programs for validation, re-calibration and re-running of the groundwater and surface water models using approved mine operation plans. <p><i>Note: The Leard Forest Mining Precinct Water Management Strategy can be developed in stages and will need to be subject to ongoing review, dependent upon the determination of and commencement of other mining projects in the area.</i></p>				

BIODIVERSITY

Biodiversity Offset Strategy

40.

The Proponent shall implement the biodiversity offset strategy described in the EA, summarised in Table 14 and shown conceptually in Appendix 7, to the satisfaction of the Secretary.

Table 13: Summary of the biodiversity offset strategy

Area	Offset Type	Minimum Size (hectares)
Willeroi Offset Area	Existing native vegetation to be enhanced, and additional native vegetation to be established with the restoration of at least 193 ha of Box	1,660
Rehabilitation Area	Native woodland vegetation communities to be re-established,	752

Note: For the purposes of this approval Box Gum Woodland refers to the EEC listed as White Box Yellow Box Blakely's Red Gum Woodland under the TSC Act, and the CEEC listed as White Box Yellow Box Blakely's Red Gum Grassy Woodland and Derived Native Grasslands under the EPBC Act, or similar EEC as may be updated from time to time.

TCM Biodiversity Management Plan 2015

Regional BTM Biodiversity Offset Strategy 2017

TCM Mine Site Rehabilitation Management Plan, March 2020

The biodiversity offset strategy is described in the Biodiversity Management Plan which states that the Willeroi offset area is 1,660 ha.

The MSRP describes the on-site rehabilitation requirements including the minimum size and vegetation species to be established.

C

TABLE A1 - PROJECT APPROVAL
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No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
Leard Forest Mining Precinct Regional Biodiversity Strategy					
41.	<p>5. The Proponent shall contribute to the funding and preparation of the Leard Forest Mining Precinct Regional Biodiversity Strategy, as required under the approvals for the Boggabri coal mine and Maules Creek coal mine, to the satisfaction of the Secretary.</p> <p>Notes:</p> <ul style="list-style-type: none"> The approvals for the Boggabri coal mine and Maules Creek coal mine require the proponents of the mines in the Leard Forest mining precinct to prepare the regional biodiversity strategy in 3 stages, including: <ul style="list-style-type: none"> Stage 1 Scoping Stage, by the end of January 2013; Stage 2 Strategy Development Stage, by the end of January 2014; and Stage 3 Strategy Review Stage, by the end of December 2018. The strategy is required to be prepared in collaboration with a working group comprising relevant government agencies and the Leard Forest mining precinct mines, and chaired by an independent person. Funding of the strategy should be based on predicted clearing of native vegetation for the three projects within the Leard Forest Mining Precinct. Based on the predicted clearing for the projects, the funding split would equate to total contributions of 36% from Boggabri (clearing of 1,385 ha), 54% from Maules Creek (clearing of 2,078ha) and 10% from Tarrawonga (clearing of 397 ha). This funding arrangement can be further refined in the Stage 1 Scoping Stage. 	Regional BTM Biodiversity Offset Strategy August 2017 approved by OEH on 1 September 2017	Preparation of the strategy was assumed by NSW DP&E as evidenced in Section 1.3 of the Strategy report.	N/A	
Revised Biodiversity Offset Strategy					
42.	<p>Within 6 months of the approval of Stage 2 of the Leard Forest Mining Precinct Regional Biodiversity Strategy the Proponent shall review, and if necessary revise, the biodiversity offset strategy for the project to the satisfaction of the Secretary. The review/revision must:</p> <p>(a) be prepared in consultation with BCD, LLS, Forests NSW, the CCC, DPIE Water and DoEE;</p> <p>(b) not reduce the size or quality of the offset area; and</p> <p>(c) be consistent (as far as is possible) with the recommendations and objectives of the Leard Forest Mining Precinct Regional Biodiversity Strategy.</p>	<p>TCM Biodiversity Management Plan 2015</p> <p>Various correspondence for submission of revised plans</p> <p>TCM Environmental Management Plan Review Record</p> <p>Interview with Environmental Superintendent</p>	The Biodiversity Management Plan has been revised and submitted several times since 2017 including revision to incorporate the BTM Regional Strategy. The Plan was last submitted on 16 June 2020. TCM is awaiting feedback on the revised plan.	C	
Threatened Species					
43.	<p>For the White Box – Yellow Box – Blakely’s Red Gum Grassy Woodland Endangered Ecological Community the Proponent shall:</p> <p>(a) ensure that the Biodiversity Offset Strategy and site Rehabilitation Strategy is focused on protection rehabilitation, re-establishment and long-term maintenance of viable stands of this community;</p> <p>(b) investigate in consultation with BCD and the LLS, all factors likely to enhance or impede the effective long term restoration of degraded remnants of this EEC in offset areas or regeneration of this EEC on disturbed areas (both offset areas and the site);</p> <p>(c) within 24 months of the date of this approval (and if possible in conjunction with Stage 2 of the Leard Forest Mining Precinct Regional Biodiversity Strategy), submit a report of this investigation and provide an implementation plan to maximise the prospects for rehabilitation and regeneration of this EEC on the offset areas and the site, for approval by the Secretary; and</p> <p>(d) incorporate the approved implementation plan into the revised Biodiversity</p>	<p>TCM Biodiversity Management Plan 2015</p> <p>TCM Box-Gum Woodland EEC Implementation Plan, January 2015</p>	Verified by previous audit	C	

TABLE A1 - PROJECT APPROVAL
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No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	Management Plan, required under condition 48.				
44.	For all threatened species on site, the Proponent shall ensure that the Biodiversity Offset Strategy and Rehabilitation Strategy are focused on protection, rehabilitation and long-term maintenance of viable stands of suitable habitat for these species.	TCM Biodiversity Management Plan 2015 TCM Mine Site Rehabilitation Management Plan, March 2020	The BMP and MSRP aim to protect threatened species and provide adequate viable long term habitat for such species.	C	
45.	The Proponent shall: (a) investigate, in consultation with BCD and the LLS, all factors likely to enhance or impede the effective long term provision of suitable habitat(s) for the following species: Speckled Warbler, Brown Treecreeper, Grey-crowned Babbler, Hooded Robin, Varied Sittella, Turquoise Parrot, Masked Owl, Yellow-bellied Sheath Tail Bat and Squirrel Glider; (b) within 12 months of the date of this approval (and if possible, in conjunction with Stage 2 of the Leard Forest Mining Precinct Regional Biodiversity Strategy), submit a report of this investigation and provide an implementation plan to ensure delivery of suitable areas of viable habitat for the species included in (a) above, for approval by the Secretary; and (c) incorporate the approved implementation plan into the revised Biodiversity Management Plan, required under condition 48.		Completed outside the audit period	NT	
Long Term Security of Offset					
46.	The Proponent shall make suitable arrangements to provide appropriate long-term security for the offset areas: (a) for the Willeroi Offset Area the long-term security shall be provided by way of: <ul style="list-style-type: none"> the Proponent entering into a conservation agreement or agreements pursuant to section 69B of the <i>National Parks and Wildlife Act 1974</i>, recording the obligations assumed by the Proponent under the conditions of this approval in relation to these offset areas, and registering the agreement(s) pursuant to section 69F of the <i>National Parks and Wildlife Act 1974</i> ; or a tenure of higher conservation status such as a National Park, or Nature Reserve, under the <i>National Parks and Wildlife Act 1974</i>, The conservation agreement(s) must be registered by the end of December 2013 unless agreed otherwise by the Secretary after consultation with BCD. The conservation agreements must remain in force in perpetuity; and (b) by the end of December 2030 unless otherwise agreed by the Secretary, for the woodland to be established in the Rehabilitation Area, as identified in Table 14, to the satisfaction of the Secretary.	Email from WHC to DPIE dated 5 December 2018 and response dated 10 December 2018 Whitehaven security bond 25/6/20	Correspondence with the Department states that Conservation Agreements for securing offset areas have been lodged. At this time the Biodiversity Conservation Trust could not process the applications before end of December 2019. Correspondence also indicates that negotiations with National Parks and Wildlife Service raring transfer of land.	C	
Biodiversity Management Plan					
47.	The Proponent shall prepare and implement a Biodiversity Management Plan for the project to the satisfaction of the Secretary. This plan must: (a) be prepared in consultation with BCD, DoEE, Forests NSW, the CCC, DPIE Water Catchments and Lands and the LLS, and be submitted to the Secretary for approval by the end of May2013; (b) describe the short, medium, and long term measures that would be implemented to: <ul style="list-style-type: none"> manage the remnant vegetation and habitat on the site and in the offset area;and implement the biodiversity offset strategy, including detailed performance and completion criteria; (c) include detailed performance and completion criteria for evaluating the performance of the biodiversity offset strategy, and triggering remedial action (if necessary);	TCM Biodiversity Management Plan 2015	The approved Biodiversity Management Plan meets the requirements of this condition.	C	

TABLE A1 - PROJECT APPROVAL
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No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<p>(d) include a detailed description of the measures that would be implemented for:</p> <ul style="list-style-type: none"> enhancing the quality of existing vegetation and fauna habitat; restoring native vegetation and fauna habitat on the biodiversity offset area and rehabilitation area through focusing on assisted natural regeneration, targeted vegetation establishment and the introduction of naturally scarce fauna habitat features; maximising the salvage of resources within the approved disturbance area – including vegetative, top and sub soils and cultural heritage resources – for beneficial reuse in the enhancement of the biodiversity offset area or rehabilitation area; collecting and propagating seed; minimising the impacts on fauna on site, including undertaking pre-clearance surveys; managing any potential conflicts between the proposed restoration works in the biodiversity offset area and any Aboriginal heritage values (both cultural and archaeological); managing salinity; controlling weeds and feral pests; controlling erosion; controlling access; and managing bushfire risk; <p>(e) include a seasonally-based program to monitor and report on the effectiveness of these measures, and progress against the detailed performance and completion criteria;</p> <p>(f) 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</p> <p>(g) include details of who would be responsible for monitoring, reviewing, and implementing the plan.</p> <p><i>Note: The Biodiversity Management Plan and Rehabilitation Management Plan need to be substantially integrated for achieving biodiversity objectives for the rehabilitated mine-site.</i></p>				
48.	<p>The Proponent shall review and if necessary revise the Biodiversity Management Plan within 6 months of the completion of Stage 2 of the Leard Forest Mining Precinct Regional Biodiversity Strategy, to the satisfaction of the Secretary. The review/revision must:</p> <p>(a) be prepared in consultation with BCD, DoEE, Forests NSW, the CCC, DPIE Water and the LLS;</p> <p>(b) be consistent with the findings of Leard Forest Mining Precinct Regional Biodiversity Strategy; and</p> <p>(c) include any implementation plans arising from the studies required under conditions 43 and 45 of this approval.</p>	<p>TCM Biodiversity Management Plan 2015</p> <p>Regional BTM Biodiversity Offset Strategy September 2017</p>	<p>The Site BMP was reviewed and resubmitted in February 2018, October 2018, December 2019 and May 2020.</p>	C	
Conservation Bond					
49.	<p>By the end of May 2013, the Proponent shall lodge a Conservation and Biodiversity Bond with the Department to ensure that the biodiversity offset strategy is implemented in accordance with the performance and completion criteria of the Biodiversity Management Plan. The sum of the bond shall be determined by:</p> <p>(a) calculating the full cost of implementing the biodiversity offset strategy (other than land</p>	<p>Email to Department on 22 July 2020 from Group Manager Approvals and Environment</p>	<p>Revised security bond submitted 27 July 2020</p>	C	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<p>acquisition costs); and</p> <p>(b) employing a suitably qualified quantity surveyor to verify the calculated costs, 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 MEG.</p> <p>Notes:</p> <ul style="list-style-type: none"> Alternative funding arrangements for long term management of the Biodiversity Offset Strategy, such as provision of capital and management funding as agreed by BCD as part of a Biobanking Agreement or transfer to conservation reserve estate can be used to reduce the liability of the conservation and biodiversity bond. The sum of the bond may be reviewed in conjunction with any revision to the biodiversity offset strategy. 				
Independent Biodiversity Audit					
	<p>By the end of June 2014 and every 3 years thereafter, unless both the Secretary and BCD agree to a different timeframe, the Proponent shall commission suitably qualified, experienced and independent person/s, whose appointment has been approved by the Secretary, to undertake an audit of the revegetation of the rehabilitation area and management and restoration within the Biodiversity Offset Strategy areas to the satisfaction of the Secretary. This audit must:</p> <p>(a) include consultation with BCD, LLS, DPIE Water, DoEE, CCC and MEG;</p> <p>(b) assess the performance of the revegetation in the rehabilitation area completed to date (and the Goonbri Creek Diversion, once commenced) against the completion criteria in the Rehabilitation Management Plan;</p> <p>(c) assess the performance of management and restoration in the off-site Biodiversity Offset Strategy areas completed to date against the completion criteria in the Biodiversity Management Plan;</p> <p>(d) identify any measures that should be implemented to improve the performance of rehabilitation, management and restoration within the rehabilitation and biodiversity offset areas; and</p> <p>(e) identify any additional measures that should be applied in the establishment of native vegetation, including riparian vegetation around the realigned Goonbri Creek, both before and after the realignment is undertaken;</p> <p>(f) if the completion criteria have not been met, or are not adequately trending towards being met, determine the likely ecological value of the rehabilitation and restoration once completed, and recommend additional measures to augment the Biodiversity Offset Strategy to ensure that it adequately offsets the project's impacts on biodiversity.</p> <p>If the audit recommends the implementation of additional measures to augment the Biodiversity Offset Strategy in accordance with (e) above, then within 6 months of the completion of the audit the Proponent shall revise the Biodiversity Offset Strategy, in consultation with the Department, BCD and DoEE, and to the satisfaction of the Secretary.</p>		Refer to Biodiversity Audit Report	C	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
HERITAGE					
Aboriginal Heritage Conservation Strategy					
51.	<p>The Proponent shall prepare and implement an Aboriginal Heritage Conservation Strategy for the project and the Biodiversity Offset Strategy areas to the satisfaction of the Secretary. This Strategy must enhance and conserve the Aboriginal cultural heritage values (both cultural and archaeological) and provide for their long-term protection and management. The Strategy must:</p> <ul style="list-style-type: none"> (a) be prepared by suitably qualified and experienced person/s whose appointment has been endorsed by the Secretary; (b) be prepared in consultation with BCD, the local Aboriginal community and other mines within the Leard Forest Mining Precinct, and submitted to the Secretary for approval within 12 months from the date of project approval; (c) identify the Aboriginal cultural heritage values of the Biodiversity Offset Strategy areas; (d) identify areas of high Aboriginal cultural heritage significance within both the site and the Leard Forest Mining Precinct; (e) identify a range of options for enhancing and conserving Aboriginal cultural heritage values, with specific consideration of the potential for the long-term protection and management of significant sites within either the site, the Biodiversity Offset Strategy areas or other lands within the Leard Forest Mining Precinct identified as having high cultural heritage significance to the Aboriginal community; and (f) consider cumulative impacts and potential for developing joint initiatives with other mines within the Leard Forest Mining Precinct for enhancing and conserving Aboriginal cultural heritage values. 	TCM Aboriginal Heritage Conservation Strategy, September 2017	<p>The currently approved AHCS meets the requirements of this condition.</p> <p>The AHCS was approved by DPIE on 10 November 2017.</p> <p>The AHCS was prepared by University of Queensland and approved by DPIE on 20 January 2016</p>	C	
Heritage Management Plan					
	<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"> (a) be prepared by suitably qualified and experienced person/s whose appointment has been endorsed by the Secretary; (b) be prepared in consultation with BCD and local Aboriginal stakeholders (in relation to the management of Aboriginal heritage values); (c) be submitted to the Secretary for approval prior to undertaking any activities that may impact heritage items or sites, unless the Secretary agrees otherwise; (d) include the following for the management of Aboriginal cultural heritage: <ul style="list-style-type: none"> ▪ a detailed archaeological salvage program for Aboriginal sites/objects within the project disturbance area, including methodology and procedures/protocols for: <ul style="list-style-type: none"> - sub-surface testing; - staged salvage, based on anticipated mine planning; - pre-disturbance monitoring; - site assessment and reporting; - research objectives to inform knowledge of Aboriginal occupation; - protection, storage and management of salvaged Aboriginal objects; - addressing relevant statutory requirements under the <i>National Parks and Wildlife Act 1974</i>; and - long term protection of salvaged Aboriginal objects; ▪ a description of the measures that would be implemented for: 	TCM Heritage Management Plan, 2014	The current HMP was approved prior to the audit period.	NT	

TABLE A1 - PROJECT APPROVAL
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No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<ul style="list-style-type: none"> - protecting, monitoring and managing Aboriginal sites outside the project disturbance area; - maintaining and managing reasonable access for Aboriginal stakeholders to cultural heritage items on site and in the biodiversity offset area; - managing the discovery of any human remains or previously unidentified Aboriginal objects on site, including (in the case of human remains) stop work provisions and notification protocols; - ongoing consultation with the local Aboriginal stakeholders in the conservation and management of Aboriginal cultural heritage both on-site and in the biodiversity offset area; - ensuring any workers on site receive suitable heritage inductions prior to carrying out any activities which may disturb Aboriginal sites, and that suitable records are kept of these inductions; <p>(e) include the following for the management of historic heritage:</p> <ul style="list-style-type: none"> ▪ a description of the measures that would be implemented for: <ul style="list-style-type: none"> - managing the discovery of human remains or previously unidentified historic heritage items at the site, including (in the case of human remains) stop work provisions and notification protocols; and - ensuring workers on site receive suitable heritage inductions prior to carrying out any development on site, and ensure that suitable records of these inductions are kept. <p><i>Note: The Department acknowledges that the initial Heritage Management Plan may not include a detailed plan for the implementation of the Aboriginal Heritage Conservation Strategy. If this occurs, the Proponent will be required to update the plan as soon as practicable following the Secretary's approval of the Aboriginal Heritage Conservation Strategy.</i></p>				

TRANSPORT

Roadworks

53.	<p>The Proponent shall:</p> <p>(a) construct the Goonbri Road realignments and associated mine access road intersection, Goonbri Road/private coal haulage road intersection and the Goonbri Road/Dripping Rock Road/Blair Athol Lane intersection as shown conceptually in the EA; and</p> <p>(b) install appropriate advance warning signs and lighting on Goonbri Road, the private coal haulage road at the intersection of the Northern Site Access Road, to the satisfaction of Council.</p> <p>The road realignments and associated intersection upgrades shall be undertaken:</p> <ul style="list-style-type: none"> ▪ to a bitumen sealed standard, unless otherwise agreed by Council; and ▪ prior to any project works occurring within 25 metres of the existing Goonbri Road alignment, or on the southern/eastern side of the existing road alignment. <p><i>Note: The road upgrade works may be undertaken in stages, with the agreement of Council.</i></p>		Not triggered	NT	
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Coal Transport

54.	<p>Whilst coal transport by road is permitted under this approval, the Proponent shall ensure that:</p> <p>(a) trucks travelling to and from the site do not exceed 40 kilometres per hour in the vicinity of the school bus when it is operating near school bus stops along the approved</p>	TCM Traffic Management Plan Master Services Agreement for Supply of Road Haulage Services between	The TCM Traffic Management Plan contains the requirements for operating in the vicinity of the school bus stop and bus. These conditions are included in the NSA with Bis Industries.	C	
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TABLE A1 - PROJECT APPROVAL
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No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<p>haulage route, unless an alternative protocol is agreed by the Secretary; and</p> <p>(b) spillage from coal haulage vehicles is minimised and promptly managed.</p>	<p>WHC and Bis Industries Limited, commencement date 28 January 2014</p> <p>Email from Ian Taylor 22/7/20 confirming how many times the road was cleaned</p>			
Traffic Management Plan					
54A.	<p>The Proponent shall prepare and implement a revised Traffic Management Plan for the Project, to the satisfaction of the Secretary. This plan must:</p> <p>(a) be prepared in consultation with RMS, Gunnedah Shire Council, Narrabri Shire Council and the owners of the Rocglen and Vickery coal mines;</p> <p>(b) be submitted to the Secretary for approval by 31 March 2017;</p> <p>(c) include a program for implementing Whitehaven's commitments in the EA;</p> <p>(d) include transport protocols that describe control measures for coal haulage:</p> <ul style="list-style-type: none"> during school bus hours; on the Kamilaroi Highway; and during seasonal and event based peak traffic periods. <p>(e) include a driver's Code of Conduct to include but not limited to:</p> <ul style="list-style-type: none"> behavioural safety practises and initiatives used by drivers to implement the transport protocols; induction process for vehicle operators and regular toolbox meetings; and complaint resolution and disciplinary procedures; <p>(f) describe measures to minimise dust from roads that may be used for access to the mine site;</p> <p>(g) arrangements to comply with cumulative coal haulage limits from the project and the Rocglen and Vickery coal mines; and</p> <p>(h) a monitoring program to audit vehicle movements, including the origin and destination of employees, against predictions in the EA.</p>	<p>TCM Traffic Management Plan, May 2016</p> <p>Road Transport Assessment, TTPP, October 2019</p> <p>Bis Pre-start toolbox, 2 November 2018</p> <p>Bis Pre-start toolbox, 3 January 2019</p> <p>Master Services Agreement for Supply of Road Haulage Services between WHC and Bis Industries Limited, commencement date 28 January 2014</p>	<p>The approved Traffic Management Plan meets the requirements of this condition.</p> <p>Section 3.5 of the TMP states that all haulage contractors will be provided with a copy of the TMP and regular toolboxes will be held with truck drivers. The auditor review a selection of toolboxes for the haulage contractor Bis. Toolbox items included speed restrictions on the haul road, transport protocols, hours of operation at TCM.</p> <p>The auditor reviewed the Master Service's Agreement (MSA) between WHC and Bis Industries Limited. The Services Schedule of the MSA describes the services to be provided and includes the requirements on hours of work, speed limits and noise levels. The MSA also refers to the WHC HSE Management System which has been made available to Bis.</p> <p>A traffic audit was conducted by TTPP in 2019. No additional mitigation measures were recommended.</p>	C	
Road Maintenance					
55.	<p>During mining operations, the Proponent shall continue to implement road maintenance agreements with Narrabri Shire Council and Gunnedah Shire Council for the maintenance of the public roads affected by the project to the satisfaction of the respective Council. These agreements may be modified from time to time by agreement of the Proponent and respective Council. If there is any dispute in relation to these agreements, then any of the parties may refer the matter to the Secretary for resolution.</p>		<p>Agreement with the Councils was finalised outside the audit period</p>	NT	
Monitoring of Coal and Gravel Transport					
56.	<p>The Proponent shall:</p> <p>(a) keep records of the:</p> <ul style="list-style-type: none"> amount of coal and gravel transported from the site (on a monthly basis); and date and time of each train movement on the Boggabri rail spur line generated by the project (if coal from the project is transported by 	Coal movement records	<p>Coal movement records are maintained as required. No gravel movements have been made during the audit period.</p>	C	

TABLE A1 - PROJECT APPROVAL
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No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	rail); and (b) make these records available on its website at the end of each calendar year.				
VISUAL					
Operating Conditions					
57.	<p>The Proponent shall:</p> <p>(a) implement all reasonable and feasible measures to minimise the visual and off-site lighting impacts of the project;</p> <p>(b) ensure no outdoor lights shine above the horizontal;</p> <p>(c) wherever possible, ensure that mobile equipment is appropriately designed and/or retrofitted to prevent light being directed above the horizontal;</p> <p>(d) ensure that all external lighting associated with the project complies with <i>Australian Standard AS4282 (INT) 1997 – Control of Obtrusive Effects of Outdoor Lighting</i> or its latest version;</p> <p>(e) provide for the establishment of trees and shrubs and/or the construction of mounding or bunding:</p> <ul style="list-style-type: none">along the realigned Goonbri Road and access road to the mine site;along the services corridor to the Boggabri Coal Mine;around the water storage dams; andat other areas identified as necessary for the maintenance of satisfactory visual amenity; and <p>(f) ensure that the visual appearance of all buildings, structures, facilities or works (including paint colours and specifications) is aimed at blending as far as possible with the surrounding landscape, to the satisfaction of the Secretary.</p>		Verified during previous audit period.	NT	
Additional Visual Impact Mitigation					
58.	<p>Upon receiving a written request from the owner of any residence on privately-owned land which has, or would have, significant direct views of the mining operations and infrastructure on-site during the project, the Proponent shall implement additional visual impact mitigation measures (such as landscaping treatments or vegetation screens) to reduce the visibility of the mining operations and infrastructure from the residences on the privately-owned land.</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">The additional visual impact mitigation measures must be aimed at reducing the visibility of the mining operations on site from affected residences, and do not require measures to reduce the visibility of the mining operations from other locations on the affected properties.The additional visual impact mitigation measures do not necessarily have to include the implementation of measures on the affected property itself (ie. the additional measures could involve the implementation of measures outside the affected property boundary that provide an		No request has been received.	NT	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations						
	<p>effective reduction in visual impacts).</p> <ul style="list-style-type: none">▪ Except in exceptional circumstances, the Secretary will not require additional visual impact mitigation to be undertaken for residences that are more than 5 kilometres from the mining operations.										
BUSHFIRE MANAGEMENT											
59.	<p>The Proponent shall:</p> <p>(a) implement all reasonable and feasible measures to manage bushfire risks, including the suspension of activities that may have the potential to ignite a fire, during adverse conditions;</p> <p>(b) ensure that the project is suitably equipped to respond to any fires on site;and</p> <p>(c) assist the Rural Fire Service, Forests NSW, emergency services and National Parks and Wildlife Services as much as possible if there is a fire in the surrounding area.</p>	<p>Section 4.10 of Biodiversity management plan</p> <p>Interview with Environmental Superintendent</p> <p>Site observations</p>	<p>Management of bushfire risk is detailed in Section 4.10 of the Biodiversity Management Plan.</p> <p>Adequate fire fighting equipment was observed on site and TCM maintains and Emergency Response Team who would be first responders to a fire on the site.</p> <p>Fire risk within the rehabilitated areas is managed by having access tracks and contour banks that act as fire breaks.</p> <p>TCM has a contract with a third party for fire fighting primarily for the offset areas to assist the RFS and ERT.</p> <p>TCM installed a water tank at the Templemore property RFS access at the request of the CCC.</p>	C							
WASTE											
60.	<p>The Proponent shall:</p> <p>(a) implement all reasonable and feasible measures to minimise the waste (including coal reject) generated by the project;</p> <p>(b) ensure that the waste generated by the project is appropriately stored, handled and disposed of; and</p> <p>(c) monitor and report on the effectiveness of waste minimisation and management measures in the Annual Review.</p>	<p>Annual Reviews 2017, 2018, 2019</p>	<p>The auditor observed waste collection and storage facilities at the site and were noted to be of a high standard. All wastes are removed from site for disposal by Namoi Waste, a suitably licensed contractor.</p> <p>Waste management and minimisation measures are reported in the annual review as required.</p>	C							
REHABILITATION											
Rehabilitation Objectives											
61.	<p>The Proponent shall rehabilitate the site to the satisfaction of MEG. This rehabilitation must be generally consistent with the proposed Rehabilitation Strategy described in the EA (and depicted conceptually in Appendix 8) and comply with the objectives in Table 15.</p> <p>Table 14: Rehabilitation objectives</p> <table><tr><th>Feature</th><th>Objective</th></tr><tr><td>Mine site (as a whole)</td><td>Safe, stable and non-polluting</td></tr><tr><td></td><td>Constructed landforms drain to the natural environment</td></tr></table>	Feature	Objective	Mine site (as a whole)	Safe, stable and non-polluting		Constructed landforms drain to the natural environment	<p>MOP 2020</p> <p>Mine Site Rehabilitation Plan 2020</p> <p>Annual Review 2019</p>	<p>The MOP and MSRP describe the rehabilitation objectives as required by this condition.</p> <p>The Goonbri Creek diversion and LPB have not been triggered during the audit period.</p> <p>The 2019 annual review reports that the total land area under active rehabilitation is 78.5 ha and no rehabilitation of agricultural lands occurred during the reporting period.</p> <p>Refer to Biodiversity Audit for assessment of performance of rehabilitation.</p>	C	
Feature	Objective										
Mine site (as a whole)	Safe, stable and non-polluting										
	Constructed landforms drain to the natural environment										

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<div>Final void</div> <div>Minimise the size and depth of the final void as far as is reasonable and feasible</div> <div>Minimise the drainage catchment of the final void as far as is reasonable and feasible</div> <div>Negligible high wall instability risk</div> <div>Surface infrastructure</div> <div>To be decommissioned and removed, unless MEG</div> <div>Agricultural land</div> <div>Establish a minimum of 210 hectares of Class 3 agricultural suitability land, including 160 hectares</div> <div>All land – excluding the 210 ha of agricultural land and the final void</div> <div>Restore ecosystem function, including maintaining or establishing self-sustaining ecosystems comprised of: <ul style="list-style-type: none"> local native plant species (particularly Box Gum Woodland EEC); and </div> <div>Goonbri Creek diversion and LPR</div> <div>See Table 13</div> <div>Community</div> <div>Ensure public safety</div> <div>Minimise the adverse socio-economic effects</div>				
Operating Conditions					
62.	<p>The Proponent shall, in consultation with the LLS:</p> <p>(a) develop a detailed soil management protocol that identifies procedures for:</p> <ul style="list-style-type: none"> comprehensive soil surveys prior to soil stripping; assessment of top-soil and sub-soil suitability for mine rehabilitation; and annual soil balances to manage soil handling including direct resspreading and stockpiling; <p>(b) maximise the salvage of suitable top-soils and sub-soils and biodiversity habitat components such as bush rocks, tree hollows and fallen timber for rehabilitation of disturbed areas within the site and for enhancement of biodiversity offset areas; and</p> <p>(c) ensure that coal reject, or any potentially acid forming interburden materials, are not emplaced at elevations in the pit shell where they may promote acid or sulphate species generation and migration beyond the pit shell.</p>	Biodiversity Management Plan 2015	The Operating Conditions are contained in the Biodiversity management Plan which was verified in the previous audit period.	C	
Progressive Rehabilitation					
63.	<p>The Proponent shall rehabilitate the site progressively, that is, as soon as reasonably practicable following disturbance. All reasonable and feasible measures must be taken to minimise the total area exposed for dust generation at any time. Interim rehabilitation strategies shall be employed when areas prone to dust generation cannot yet be permanently rehabilitated.</p> <p><i>Note: It is accepted that the parts of the site that are progressively rehabilitated may be subject to further disturbance in future.</i></p>	<p>MOP 2020</p> <p>Mine Site Rehabilitation Plan March 2020</p>	<p>The MOP (Section 2.3.9) and MSRP (Section 5) describe the rehabilitation program and methodology. The auditor observed seeded topsoil stockpiles and mulch used to prevent erosion.</p>	C	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
Rehabilitation Management Plan					
64.	<p>The Proponent shall prepare and implement a Rehabilitation Management Plan to the satisfaction of MEG. This plan must:</p> <ul style="list-style-type: none"> (a) be prepared in consultation with the Department, Forests NSW, DPIE Water, BCD, LLS and Council; (b) be submitted to the MEG for approval by the end of May 2013; (c) be prepared in accordance with any relevant MEG guideline; (d) describe how the rehabilitation of the site would be integrated with: <ul style="list-style-type: none"> ▪ the implementation of the biodiversity offset strategy; and ▪ the final landform for the Boggabri coal mine; (e) include detailed performance and completion criteria for evaluating the performance of the rehabilitation of the site, and triggering remedial action (if necessary); (f) describe the measures that would be implemented to ensure compliance with the relevant conditions of this approval and address all aspects of rehabilitation including mine closure, final landform and final land use; (g) include interim rehabilitation where necessary to minimise the area exposed for dust generation; (h) include a program to monitor, independently audit and report on the effectiveness of the rehabilitation measures, and progress against the detailed performance and completion criteria; (i) include a coal rejects disposal procedure and monitoring program for potential acid generation; and (j) build to the maximum extent practicable on the other management plans required under this approval. <p><i>Note: The Biodiversity Management Plan and Rehabilitation Management Plan require substantial integration to achieve biodiversity objectives for the rehabilitated mine site.</i></p>	<p>Mine Site Rehabilitation Plan March 2020</p> <p>Approval letter dated 19 March 2020</p>	<p>TCM has developed an MSRP that complies with this condition.</p> <p>The current MSRP was approved by MEG in March 2020.</p> <p>Refer to Biodiversity Audit Report for assessment of rehabilitation performance.</p>	C	
Final Void Design and Closure					
65.	<p>The Proponent shall prepare and implement an updated Final Void and Mine Closure Plan (as a component of the overall Rehabilitation Management Plan required under condition 64 of schedule 3) to the satisfaction of MEG, following consultation with the Secretary. A draft plan must be prepared and submitted to MEG by the end of December 2019, and a final plan must be prepared and submitted to MEG by the end of December 2024. Each version of the plan must:</p> <ul style="list-style-type: none"> (a) be subject to independent review and verification by suitably qualified, experienced and independent person/s (including a groundwater expert) whose appointment has been approved by the Secretary; (b) identify and consider: <ul style="list-style-type: none"> ▪ options for continued mining beyond current project life; ▪ interactions with the final landform of adjoining mines (including any direct or indirect interaction between final voids); ▪ opportunities for integrated mine planning with adjoining mines to minimise environmental impacts of the mines' final landforms; ▪ all reasonable and feasible landform options for the final void (including filling); ▪ predicted stability of the proposed landforms; and ▪ predicted hydrochemistry and hydrogeology (including long-term groundwater 	<p>Draft Final Void Design Plan dated December 2019 submitted by email to Scott Mitchell on 23 December 2019</p> <p>Letter of endorsement Dr Noel Merrick and Ms Claire Stephenson of SLR and Mr Julian Orth WRM Water and Environment dated 19 November 2019</p>	<p>The Draft Final Void Design and Mine Closure Plan was submitted to MEG on 23 December 2019. The draft plan meets the requirements of this condition.</p> <p>The draft plan was independently reviewed by persons endorsed by Meg as required.</p>	C	

TABLE A1 - PROJECT APPROVAL
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No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<p>recovery and void groundwater quality);</p> <p>(c) include a detailed proposed landform design; and</p> <p>(d) demonstrate that the proposed final landform:</p> <ul style="list-style-type: none"> satisfies the relevant objectives in Table 15; minimises the extent of any resulting pit lake; avoids salt scalding; maximises the capacity of emplaced spoil to drain to the natural environment; and ensures that drained waters do not adversely affect the downstream environment. 				
AGRICULTURE					
66.	<p>The Proponent shall use its best endeavours to ensure that the agricultural productivity and production of non-operational project-related land is maintained or enhanced.</p> <p><i>Note: This includes properties primarily used for agriculture that are acquired by the Proponent due to noise and/or air quality impacts. However, it does not include land where disturbance is permitted under the conditions of this approval or land that forms part of the biodiversity offset area.</i></p>	Farm Management Plan 2016	The Farm Management Plan was verified in the previous audit period.	C	
SCHEDULE 4 – ADDITIONAL PROCEDURES					
NOTIFICATION OF LANDOWNERS/TENANTS					
1.	<p>Within 3 months of the date of this approval, the Proponent shall:</p> <p>(a) notify in writing the owners of:</p> <ul style="list-style-type: none"> the land listed in Table 1 of schedule 3 that they have the right to require the Proponent to acquire their land in accordance with the procedures in conditions 8 and 9 below at any stage during the project; any residence on the land listed in Table 1 of schedule 3 that they have the right to request the Proponent to ask for additional noise and/or air quality mitigation measures to be installed at their residence at any stage during the project; and any privately-owned land within 2 kilometres of the approved open-cut mining pit/s that they are entitled to ask 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; <p>(b) notify the tenants of any mine-owned land of their rights under this approval; and</p> <p>(c) send a copy of the NSW Health fact sheet entitled “Mine Dust and You” (as may be updated from time to time) to the owners and/or existing tenants of any land (including mine-owned land) where the predictions in the EA identify that dust emissions generated by the project are likely to be greater than the relevant air quality criteria in schedule 3 at any time during the life of the project.</p>		Outside audit period	NT	
2.	<p>Prior to entering into any tenancy agreement for any land owned by the Proponent that is predicted to experience exceedences of the recommended dust and/or noise criteria, or for any of the land listed in Table 1 that is subsequently purchased by the Proponent, the Proponent shall:</p> <p>(a) advise the prospective tenants of the potential health and amenity impacts associated with living on the land, and give them a copy of the NSW Health fact sheet entitled</p>		A new tenancy agreement was prepared for the Templemore property which was acquired in October 2017. Refer Sch 3 C 27 above.	C	

TABLE A1 - PROJECT APPROVAL
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No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<p>“Mine Dust and You” (as may be updated from time to time);</p> <p>(b) advise the prospective tenants of the rights they would have under this approval; and</p> <p>(a) request the prospective tenants consult their medical practitioner to discuss the air quality monitoring data and predictions and health impacts arising from this information, to the satisfaction of the Secretary.</p>				
3.	<p>As soon as practicable after obtaining monitoring results showing:</p> <p>(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 the landowner until the project is complying with the relevant criteria again; and</p> <p>(b) an exceedance of the relevant air quality criteria schedule 3, the Proponent shall send to the affected landowners and/or existing tenants of the land (including the tenants of any mine-owned land) a copy of:</p> <ul style="list-style-type: none"> ▪ the NSW Health fact sheet entitled “Mine Dust and You” (as may be updated from time to time); and ▪ the monitoring data, in an appropriate format so that a medical practitioner can assist the resident in making an informed decision on the health risks associated with occupation of the property. 	<p>Air quality monitoring results</p> <p>Correspondence with DPIE related to air quality exceedances</p>	<p>No air quality exceedances have been attributed to the mine in the audit period.</p>	NT	

INDEPENDENT REVIEW

4.	<p>If an owner of privately-owned land considers the project to be exceeding the criteria in schedule 3 at his/her land, 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 expert, whose appointment has been approved by the Secretary, to:</p> <ul style="list-style-type: none"> ▪ consult with the landowner to determine his/her concerns; ▪ conduct monitoring to determine whether the project is complying with the relevant impact assessment criteria in schedule 3; and ▪ if the project is not complying with the relevant criteria, then: <ul style="list-style-type: none"> ○ determine if the more than one mine is responsible for the exceedance, and if so the relative share of each mine towards the impact on the land; ○ identify the measures that could be implemented to ensure compliance with the relevant criteria; and <p>(b) give the Secretary and landowner a copy of the independent review.</p>	<p>Interview with Environmental Superintendent</p>	<p>Not triggered</p>	NT	
5.	<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, and that the project is primarily responsible for this non-compliance, then the Proponent shall:</p> <p>(a) implement all reasonable and feasible mitigation measures, in consultation with the landowner and appointed independent expert, and conduct further monitoring until the project complies with the relevant criteria; or</p> <p>(b) secure a written agreement with the landowner to allow exceedances of the relevant criteria, to the satisfaction of the Secretary.</p>	<p>Interview with Environmental Superintendent</p>	<p>Not triggered</p>	NT	

TABLE A1 - PROJECT APPROVAL
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No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	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 conditions 8 and 9 below.				
6.	<p>If the independent review determines that the relevant criteria are being exceeded, but that more than one mine is responsible for this exceedance, then together with the relevant mine/s the Proponent shall:</p> <p>(a) implement all reasonable and feasible mitigation measures, in consultation with the landowner and appointed independent expert, and conduct further monitoring until there is compliance with the relevant criteria; or</p> <p>(b) secure a written agreement with the landowner and other relevant mine/s to allow exceedances of the relevant impact assessment criteria, to the satisfaction of the Secretary.</p> <p>If the independent review determines that the project is not complying with the relevant acquisition criteria in schedule 3, but that more than one mine is 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 on as equitable a basis as possible with the relevant mine/s, in accordance with the procedures in conditions 8 and 9 below.</p>	Interview with Environmental Superintendent	Not triggered	NT	
Biodiversity & Heritage					
7.	<p>If a person has good reason to believe the Proponent is not implementing the biodiversity and/or heritage conditions in schedule 3 satisfactorily, then he/she may ask the Secretary in writing for an independent review of the matter.</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"> consult with the person and/or any relevant agencies; investigate the person's complaints/claims; review the environmental performance of the Proponent; determine whether the Proponent's performance is satisfactory or not; and if necessary recommend measures to improve the Proponent's performance; and <p>(b) give the Secretary and complainant a copy of the independent review.</p>	Interview with Environmental Superintendent	Not triggered	NT	
LAND ACQUISITION					
8.	<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 the written request, as if the land was unaffected by the project, having regard to the:</p> <ul style="list-style-type: none"> existing and permissible use of the land, in accordance with the applicable planning instruments at the date of the written request; and presence of improvements on the land and/or any approved building or structure which has been physically commenced at the date of the landowner's written request, and is due to be completed subsequent to that date, but excluding any improvements that have resulted from the implementation of the additional mitigation measures required under condition 2 of schedule 3; 		Refer Sch3 C 27 above	C	

TABLE A1 - PROJECT APPROVAL
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No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<p>(b) the reasonable costs associated with:</p> <ul style="list-style-type: none">relocating within the Tamworth, Narrabri, Gunnedah or Moree local government areas, or to any other local government area as agreed by the Secretary; andobtaining legal advice and expert advice for determining the acquisition price of the land, and the terms upon which it is to be acquired; and <p>(c) reasonable compensation for any disturbance caused by the land acquisition process.</p> <p>However, if 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 shall 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">consider submissions from both parties;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;prepare a detailed report setting out the reasons for any determination; andprovide a copy of the report to both parties. <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 consultation with the independent valuer and both parties, the Secretary will determine a fair and reasonable acquisition price for the land, having regard to the matters referred to in paragraphs (a)-(c) above, the independent valuer's report, the detailed report of the party that disputes the independent valuer's determination and any other relevant submissions.</p> <p>Within 14 days of this determination, the Proponent shall make a binding written offer to the landowner to purchase the land at a price not less than the Secretary's determination.</p> <p>If the landowner refuses to accept the 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.</p>				
9.	The Proponent shall pay all reasonable costs associated with the land acquisition process described in condition 8 above, including the costs associated with obtaining Council approval for any plan of subdivision (where permissible), and registration of this plan at the Office of the Registrar-General.		As above	C	

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. The strategy must:	TCM Environmental Management Strategy 2018	The current approved EMS meets the requirements of this condition.	C	
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TABLE A1 - PROJECT APPROVAL
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No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<p>(a) be submitted to the Secretary for approval by the end of May 2013;</p> <p>(b) provide the strategic framework for environmental management of the project;</p> <p>(c) identify the statutory approvals that apply to the project;</p> <p>(d) describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the project;</p> <p>(e) describe the procedures that would be implemented to:</p> <ul style="list-style-type: none"> keep the local community and relevant agencies informed about the operation and environmental performance of the project; receive, record, handle, and respond to complaints; resolve any disputes that may arise during the course of the project; respond to any non-compliance; respond to emergencies; and <p>(f) include:</p> <ul style="list-style-type: none"> copies of any strategies, plans and programs approved under the conditions of this approval; and a clear plan depicting all the monitoring to be carried out in relation to the project. 	Approval letter from DPIE dated 12 July 2018	A copy of the EMS is available on the company website and references all other plans and programs required by the Approval which are also available online.		
Adaptive Management					
2.	<p>The Proponent must assess and manage project-related risks to ensure that there are no exceedences of the criteria and/or performance measures in schedule 3. Any exceedence of these criteria and/or performance measures constitutes a breach of this approval and may be subject to penalty or offence provisions under the EP&A Act or EP&A Regulation. Where any exceedence of these criteria and/or performance measures has occurred, the Proponent must at the earliest opportunity:</p> <p>(a) take all reasonable and feasible steps to ensure that the exceedence ceases and does not reoccur;</p> <p>(b) consider all reasonable and feasible options for remediation (where relevant) and submit a report to the Department describing those options and any preferred remediation measures or other courses of action; and</p> <p>(c) implement remediation measures as directed by the Secretary, to the satisfaction of the Secretary.</p>	Response to Notice 1592182 dated 17 March 2020	An incident occurred on 10 February 2020 following a rainfall event where Sediment Dam 2 suffered an embankment failure. Following the event TCM has engaged a third party (Aurecon) to undertake a comprehensive review of water management structures. The review has identified some remedial works to drop drains and ponds as well as training needs and inspection programs. TCM is also in the process of installing automatic water level meters in the ponds.	C	
Management Plan Requirements					
3.	<p>The Proponent shall ensure that the management plans required under this approval are prepared in accordance with any relevant guidelines, and include:</p> <p>(a) detailed baseline data;</p> <p>(b) a description of:</p> <ul style="list-style-type: none"> 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 development or any management measures; <p>(c) a description of the measures that would be implemented to comply with the relevant statutory requirements, limits, or performance measures/criteria;</p> <p>(d) a program to monitor and report on the:</p>		Management plans required by this Approval have been prepared in accordance with this condition, except as where noted in this report.	C	

TABLE A1 - PROJECT APPROVAL
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No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<ul style="list-style-type: none"> impacts and environmental performance of the project; effectiveness of any management measures (see c above); <p>(e) a contingency plan to manage any unpredicted impacts and their consequences;</p> <p>(f) a program to investigate and implement ways to improve the environmental performance of the project over time;</p> <p>(g) a protocol for managing and reporting any:</p> <ul style="list-style-type: none"> incidents; complaints; non-compliances with statutory requirements; and exceedences of the impact assessment criteria and/or performance criteria; and <p>(h) a protocol for periodic review of the plan.</p>				
Annual Review					
4.	<p>By the end of June each year (or as otherwise agreed by the Secretary), the Proponent shall review the environmental performance of the project for the previous calendar year to the satisfaction of the Secretary. This review must:</p> <p>(a) describe the development (including any rehabilitation) that was carried out in the past calendar year, and the development that is proposed to be carried out over the current calendar year;</p> <p>(b) include a comprehensive review of the monitoring results and complaints records of the project over the past year, which includes a comparison of these results against the:</p> <ul style="list-style-type: none"> relevant statutory requirements, limits or performance measures/criteria; monitoring results of previous years; and relevant predictions in the EA; <p>(c) identify any non-compliance over the last year, and describe what actions were (or are being) taken to ensure compliance;</p> <p>(d) identify any trends in the monitoring data over the life of the project;</p> <p>(e) identify any discrepancies between the predicted and actual impacts of the project, and analyse the potential cause of any significant discrepancies; and</p> <p>(f) describe what measures will be implemented over the next year to improve the environmental performance of the project.</p>	<p>Annual Reviews 2017, 2018, 2019</p> <p>Emails for submission of Annual Reviews dated 29/3/2018, 28/3/2019 and 27/3/2020</p>	<p>Annual reviews have been prepared and submitted as required by this condition.</p>	C	
Revision of Strategies, Plans and Programs					
	<p>Within 3 months of the submission of an:</p> <p>(a) annual review under condition 4 above;</p> <p>(b) incident report under condition 8 below;</p> <p>(c) audit under condition 10 below; or</p> <p>(d) any modification to the conditions of this approval, the Proponent shall review, and if necessary revise, the strategies, plans, and programs required under this approval to the satisfaction of the Secretary.</p> <p><i>Note: This is to ensure the strategies, plans and programs are updated on a regular basis, and incorporate any recommended measures to improve the environmental performance of the project.</i></p>	<p>Environmental Management Plan</p> <p>Review Record as at June 2020</p> <p>Management Plans as required by the Approval</p>	<p>Management plans are reviewed, revised and submitted to DPIE as required by this condition.</p> <p>TCM maintains a comprehensive register detailing the nature of revisions and submission dates. Each plan contains a revisions register which also details the revisions made for each review.</p>	C	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
Management of Cumulative Impacts					
6.	In conjunction with the owners of the nearby mines in the Leard Forest Mining Precinct, the Proponent shall use its best endeavours to minimise the cumulative impacts of the project on the surrounding area, to the satisfaction of the Secretary.	Minutes from BTN Environment monthly meeting 2/4/20 and 4/7/19 BTM CCC meeting minutes	Monthly environment meetings are held with the other mine sites (Boggabri and Maules Creek) which is attended by at least one representative of each mine. There is a standing agenda which includes cumulative impacts such as groundwater, water sharing, noise strategy, vegetation corridor management, joint strategies and land ownership. A join CCC is convened twice per year.	C	
Community Consultative Committee					
7.	<p>The Proponent shall establish and operate a Community Consultative Committee (CCC) for the project to the satisfaction of the Secretary. This CCC must be operated in general accordance with the <i>Guidelines for Establishing and Operating Community Consultative Committees for Mining Projects</i> (Department of Planning, 2007, or its latest version), and be operating by the end of May 2013.</p> <p>The CCC must seek to include joint membership with CCCs for other operating coal mines within the Leard Forest Mining Precinct, unless otherwise agreed by the Secretary.</p> <p>Notes:</p> <ul style="list-style-type: none"> <i>The CCC is an advisory committee. The Department and other relevant agencies are responsible for ensuring that the Proponent complies with this approval.</i> <i>In accordance with the Department's guideline, the CCC should be comprised on an independent chair and appropriate representation from the Proponent, Council and the local community.</i> 	CCC meeting minutes and BTM CCC meeting minutes	The TCM CCC meets on a quarterly basis. CCC meeting minutes are available on the WHC website. The BTM complex joint CCC meets twice per year.	C	
REPORTING					
Incident Reporting					
8.	The Proponent shall notify, at the earliest opportunity, the Secretary and any other relevant agencies of any incident that has caused, or threatens to cause, material harm to the environment. For any other incident associated with the project, the Proponent shall notify the Secretary and any other relevant agencies as soon as practicable after the Proponent becomes aware of the incident. Within 7 days of the date of the incident, the Proponent shall provide the Secretary and any relevant agencies with a detailed report on the incident, and such further reports as may be requested.	TAR Incident and Exceedance Register	TCM maintains an incident and exceedance register which records all incidents and exceedances related to the approval and EPL. The auditor reviewed incident notification for an a wet weather release on 8 February 2020 which was notified to DPIE on 20 February following receipt of laboratory analysis. The 7 day report was submitted on 27 February 2020.	C	
Regular Reporting					
9.	The Proponent shall provide regular reporting on the environmental performance of the project on its website, in accordance with the reporting arrangements in any plans or programs approved under the conditions of this approval.	Whitehaven Coal website	Reports of environmental performance and monitoring are provided on the company website.	C	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
AUDITING					
Independent Environmental Audit					
10.	<p>By the end of June 2014 and every 3 years thereafter, unless the Secretary directs otherwise, the Proponent shall commission and pay the full cost of an Independent Environmental Audit of the project. This audit must:</p> <ul style="list-style-type: none"> (a) be conducted by a suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Secretary; (b) include consultation with the relevant agencies; (c) assess the environmental performance of the project and assess whether it is complying with the requirements in this approval, and any other relevant approvals, relevant EPL/s and/or Mining Lease/s (including any assessment, plan or program required under these approvals); (d) assess whether the Proponent is implementing best noise, blasting and air quality management practice; (e) investigate and report on the measures taken to minimise the noise and air quality impacts of the project during meteorological conditions and/or extraordinary events when the relevant noise and air quality limits in this approval do not apply, including: <ul style="list-style-type: none"> ▪ the effectiveness of these measures in maintaining impacts within the relevant criteria in this approval and/or the limits in the relevant EPL; and ▪ any additional measures available to mitigate impacts under such conditions; (f) review the adequacy of any approved strategy, plan or program required under the abovementioned approvals; and (g) recommend measures or actions to improve the environmental performance of the project and/or any strategy, plan or program required under these approvals. <p><i>Note: This audit team must be led by a suitably qualified auditor, and include experts in noise, air quality, water, ecology, and any other fields specified by the Secretary.</i></p>	TAR- Independent Environmental Audit Report 2017	The last audit was conducted in July 2017.	C	
ACCESS TO INFORMATION					
12.	<p>The Proponent shall:</p> <ul style="list-style-type: none"> (a) within 3 months of the date of this approval, make the following information publicly available on its website: <ul style="list-style-type: none"> ▪ the EA; ▪ all current statutory approvals for the project; ▪ approved strategies, plans and programs required under the conditions of this approval; ▪ a comprehensive summary of the monitoring results of the project, which have been reported in accordance with the various plans and programs approved under the conditions of this approval; ▪ a complaints register, which is to be updated on a monthly basis; ▪ minutes of CCC meetings; ▪ the last five annual reviews; ▪ any independent environmental audit, and the Proponent's response to the recommendations in any audit; ▪ any other matter required by the Secretary; and (b) keep this information up to date, to the satisfaction of the Secretary. 	Whitehaven Coal website	The required information is available on the company website.	C	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
On-line Communication of Onsite Activities and Monitoring of Noise and Air Quality					
13.	<p>The Proponent shall, within 3 months of the date of this approval:</p> <p>(a) make the following information for the project publicly available on its website, on a daily basis and in a clearly understandable form:</p> <ul style="list-style-type: none"> daily weather forecasts for the coming week; proposed operational responses to these weather forecasts; real-time noise and air quality monitoring data (subject to any necessary caveats); and any operational responses that were taken in response to the noise and air quality monitoring data, and <p>(b) make provision on its website for the provision of on-line and/or email comments by members of the community regarding this information, to the satisfaction of the Secretary.</p>	Whitehaven Coal website	Daily reports are available on the company website. An email address is provided for submission of comments.	C	
Tarrawonga Coal Project Environmental Assessment - Statement of Commitments					
SOC1.1 Proposed Project Environmental Management, Monitoring and Reporting					
	<p>TCPL will review and revise the existing Tarrawonga Coal Mine management and monitoring plans listed in Table SOC-1. Table SOC-1 also lists new management and monitoring plans that are proposed to be prepared for the Project.</p> <p>SOC-1 includes:</p> <ul style="list-style-type: none"> Management and Monitoring Environmental Management Strategy Water Management Plan Site Water Balance Erosion and Sediment Control Plan Surface Water Monitoring Program Groundwater Monitoring Program Surface and Groundwater Response Plan Goonbri Creek Management Plan* Noise Management Plan Blast Management Plan Air Quality and Greenhouse Gas Management Plan Biodiversity Offset Strategy Biodiversity Management Plan* Offset Area Management Plan* Farm Management Plan* Aboriginal Heritage Management Plan Waste Management Plan Rehabilitation Strategy Rehabilitation Management Plan Bushfire Management Plan Reporting Requirements Annual Environmental Management Report and Mining Operations Plan or Rehabilitation and Environmental Management Plan Licences and Approvals Greenhouse Gas Reporting <p>(* = New management plans to be prepared)</p> <p>Note most of these plans have been revised but are not yet approved by the DG.</p>		Verified through Conditions of Approval	C	

TABLE A1 - PROJECT APPROVAL
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No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	The existing monitoring program at the Tarrawonga Coal Mine will be augmented to address additional Project disturbance areas and the open cut extensions.		Verified through Conditions of Approval	C	
	Environmental management, monitoring and reporting will be conducted in accordance with finalised Project Approval conditions, with the final monitoring details (locations, parameters and frequencies) to be provided in the relevant management plans/monitoring programs.		Verified through Conditions of Approval	C	
Specific environmental Commitments					
	Environmental management and offset measures to be implemented for the Project are described in Section 4. Key commitments include:		Not triggered	NT	
	Design and construction of an engineered low permeability barrier to the east and south-east of the open cut;		Not triggered	NT	
	Design, construction and implementation of a permanent Goonbri Creek alignment and associated flood bund;		Not triggered	NT	
	Integration of key aspects of the Project with the adjoining Boggabri Coal Mine (i.e. Northern Emplacement, coal processing and loading of Project product coal onto trains);		Not triggered	NT	
	Cessation of sized run-of-mine (ROM) coal road transport to the Whitehaven Coal Handling and Preparation Plant (once suitable approvals and upgrades are in place);		Not triggered	NT	
	Management and mitigation of operational noise;		Verified through Conditions of Approval	C	
	Rehabilitation of Project disturbance areas, including the reinstatement of key agricultural and ecological values;		Verified through Conditions of Approval	C	
	Provision of biodiversity offset measures for the Project;		Verified through Conditions of Approval	C	
	Management of the Project final void to minimise potential long-term impacts on water resources; and		Verified through Conditions of Approval	C	
	Participation in joint air quality, operational noise and regional groundwater monitoring schemes with the adjoining Boggabri Coal Mine and the Maules Creek Coal Project.		Verified through Conditions of Approval	C	
Low permeability barrier					
	A low permeability barrier will be constructed in the alluvium to the east and south-east of the open cut. Construction of the low permeability barrier will be completed before the Project open cut intersects the alluvium (approximately Year 12).		Not triggered	NT	
	The design objectives of the low permeability barrier include minimising the potential for drainage of alluvial groundwater into the open cut during operations and post-mining, and maintaining the hydraulic character of Goonbri Creek.		Not triggered	NT	
	TCPL commits to construction of the low permeability barrier to meet the following design objectives: <ul style="list-style-type: none">• minimise the potential for local drainage of alluvial groundwater into the open cut during operations and post-mining;• minimise the potential for future instability of the open cut batters formed in the alluvium;• maintain the hydraulic character of Goonbri Creek by minimizing the potential loss of baseflow; and• maintain the value of alluvial groundwater, by minimizing potential interactions with the mine final void, post-mining.		Not triggered	NT	

TABLE A1 - PROJECT APPROVAL
Compliance with Project Approval 11_0047

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	In addition, TCPL will augment the existing piezometer network with additional sites to validate the performance of the low permeability barrier.		Not triggered	NT	
Permanent Goonbri Creek Alignment and Associated Flood Bund					
	In approximately Year 15, open cut mining would remove a 3 kilometre (km) section of Goonbri Creek. Prior to the open cut advancing into this section of the creek, the permanent Goonbri Creek alignment will be established.		Not triggered	NT	
	A permanent flood bund will also be constructed to prevent inundation of the open cut during operations and postmining. The permanent flood bund will generally coincide with the alignment of the low permeability barrier.		Not triggered	NT	
	TCPL commits to the design, construction and implementation of the permanent Goonbri Creek alignment to meet the following design objectives: Construct a low flow channel that approximates the existing section of Goonbri Creek upstream of the Project in terms of stream geometry, hydrology and geomorphology;		Not triggered	NT	
	Mimic the meandering path of the existing alignment of Goonbri Creek, such that the length of the permanent Goonbri Creek alignment is approximately the same length as the section of Goonbri Creek being removed;		Not triggered	NT	
	Minimise the disturbance to the reaches of Goonbri Creek upstream of the permanent Goonbri Creek alignment; and		Not triggered	NT	
	Provide a stable transition back to the existing Goonbri Creek alignment which results in no detectable change to the hydraulic conditions in the reaches of Goonbri Creek or the Bollol Creek floodplain area downstream.		Not triggered	NT	
	In addition, TCPL commits to the design and construction of the permanent flood bund to a height that will provide protection against the peak flood height associated with a Probable Maximum Precipitation rainfall event.		Not triggered	NT	
	TCPL will develop and implement a Goonbri Creek Management Plan prior to the commencement of construction activities associated with the low permeability barrier, permanent Goonbri Creek alignment and flood bund.		Not triggered	NT	
	The Goonbri Creek Management Plan will describe: The design and construction details of the permanent Goonbri Creek alignment and flood bund;		Not triggered	NT	
	Revegetation objectives and activities;		Not triggered	NT	
	Water quality, ecological, hydrological and geomorphic performance and completion criteria for the permanent Goonbri Creek alignment based on baseline conditions; and		Not triggered	NT	
	A monitoring/maintenance program for water quality, ecological, hydrological and geomorphic integrity of the permanent Goonbri Creek alignment.		Not triggered	NT	
Management of operational noise					
	TCPL will implement the following noise management and mitigation measures to appreciably reduce noise emissions associated with the Project: Installation of an earth bund on the southern side of exposed sections of the services corridor (i.e. ROM coal haul road to the Boggabri Coal Mine);		Not hauling to Boggabri	NT	

TABLE A1 - PROJECT APPROVAL
Compliance with Project Approval 11_0047

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	Modified alignment of haul routes to reduce their exposure relative to nearby receivers; and		Modified alignment of haul routes has not been necessary.	NT	
	A reduction in the number of mobile fleet items operating during the evening and night-time periods.	Interview with Environmental Superintendent	Less personnel are working at night and fewer trucks are operating. Real time noise monitoring is undertaken and alarms raised if noise is excessive. There are no operations between 0330 and 0630	C	
Rehabilitation Objectives and Final Landform					
	The Project final landform and revegetation program will provide for a combination of approximately 752 ha of native woodland/forest and some 210 ha of Class 3 agricultural suitability land.		Verified through Conditions of Approval	C	
	The agricultural land will be capable of being used for pasture production for grazing and occasional cropping. Revegetation of woodland/forest areas will include the planting of species characteristic of the local vegetation communities, including species from the Box-Gum Woodland endangered ecological community.		Verified through Conditions of Approval	C	
	In addition, TCPL commits to a riparian vegetation enhancement program on a 3.2 km section of Goonbri Creek downstream of the Project open cut, through measures such as revegetation and stock exclusion.		Verified through Conditions of Approval	C	
	A Rehabilitation Management Plan will be developed and implemented for the Project, including a rehabilitation monitoring program designed to track the progress of rehabilitation and revegetation.		Verified through Conditions of Approval	C	
Biodiversity offset measures					
	TCPL commits to the provision of an area to offset the residual impacts of the Project on flora and fauna and maintain or improve the biodiversity values of the region in the medium to long-term.		Verified through Conditions of Approval	C	
	The biodiversity offset for the Project comprises approximately 1,600 ha of freehold land that has been purchased by Whitehaven.		Verified through Conditions of Approval	C	
	The offset is situated approximately 20 km to the north-east of the Project and adjoins Mount Kaputar National Park (Figure SOC-2). Prior to its recent purchase by Whitehaven the offset area was part of a larger agricultural property.		Verified through Conditions of Approval	C	
	Ecological gains from the biodiversity offset include: Similar vegetation communities/fauna habitats, compared to the Project area, will be conserved/enhanced in the biodiversity offset area.		Verified through Conditions of Approval	C	
	The biodiversity offset area is suitably located to benefit flora and fauna populations (biodiversity values) potentially impacted by the Project.		Verified through Conditions of Approval	C	
	The biodiversity offset area is located adjacent to Mount Kaputar National Park.		Verified through Conditions of Approval	C	
	Ephemeral creeks occur within the biodiversity offset area, providing a diversity of habitats.		Verified through Conditions of Approval	C	
	Substantial areas of Box-Gum Woodland (232 ha) occur in the biodiversity offset area.		Verified through Conditions of Approval	C	

TABLE A1 - PROJECT APPROVAL
Compliance with Project Approval 11_0047

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	Through active management, particularly of areas previously cleared for agriculture, the ecological values of the biodiversity offset area can be further improved. TCPL commits to a number of management measures to enhance the offset area's flora and fauna values. These measures will be detailed in the Offset Area Management Plan to be prepared for the Project.		Verified through Conditions of Approval	C	
	The Offset Area Management Plan will also include a program to monitor and audit the effectiveness of the management measures and to evaluate performance against specified completion criteria.		Verified through Conditions of Approval	C	
	TCPL intends to reach an agreement with the New South Wales (NSW) Government so that the biodiversity offset area can be permanently added to the adjoining Mount Kaputar National Park.		Verified through Conditions of Approval	C	
	In the interim, TCPL will enter into a conservation arrangement with the NSW Government to ensure the protection and management of the offset area (e.g. a voluntary conservation agreement with the NSW Minister for the Environment).		Verified through Conditions of Approval	C	
Management of the Project Final void					
	TCPL commits to installing permanent perimeter bunds and/or diversion channels to limit the catchment area of the final void.		Verified through Conditions of Approval	C	
	In addition, TCPL will design and construct the final void to minimise the long-term drawdown and potential water quality effects on local groundwater aquifers. This will be achieved by adjusting the final void batter angles and/or placing additional waste rock backfill in the final void such that a permanent waterbody will form and reach an equilibrium level close to, but below, the local pre-mining groundwater level in the coal measures.		Verified through Conditions of Approval	C	
	TCPL will adopt an adaptive management approach to the final void design and mine closure planning for the Project. Final void design and mine planning will be undertaken by TCPL in consultation with relevant government agencies as a component of the Rehabilitation Management Plan.		Verified through Conditions of Approval	C	
Participation in Joint Air Quality, Operational Noise and Regional Groundwater Monitoring					
	TCPL will work with the proponents of the Boggabri Coal Mine and Maules Creek Coal Project to develop and implement a joint network of real-time particulate matter monitors, operational noise monitors and regional groundwater monitoring in the vicinity of the Project. The details of the joint network will be provided in the revised Air Quality and Greenhouse Gas Management Plan, Noise Management Plan and Water Management Plan.		Verified through Conditions of Approval	C	

Item	Assessment Requirement	Reference/ Evidence	Comments	Compliance	Recommendations												
1 ADMINISTRATIVE CONDITIONS																	
A1 What the licence authorises and regulates																	
A1.1	<div>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.</div> <div>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.</div> <table><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>> 2000000 - 5000000 T annual handing capacity</td></tr><tr><td>Extractive activities</td><td>Extractive activities</td><td>> 50000 - 100000 T annual capacity to extract or process</td></tr><tr><td>Mining for coal</td><td>Mining for coal</td><td>> 2000000 - 3500000 T annual production capacity</td></tr></tbody></table>	Scheduled Activity	Fee Based Activity	Scale	Coal works	Coal works	> 2000000 - 5000000 T annual handing capacity	Extractive activities	Extractive activities	> 50000 - 100000 T annual capacity to extract or process	Mining for coal	Mining for coal	> 2000000 - 3500000 T annual production capacity	Annual Reviews 2017, 2018 and 2019 Coal haulage records Interview with Environment Superintendent	Data provided in the annual reviews, haulage records and by the Environment Superintendent confirms that the extracted tonnes are as below. 2020: 2.357M FY 20 2019: 2.26M 2018: 2.75M 2017: 1.87M	C	
Scheduled Activity	Fee Based Activity	Scale															
Coal works	Coal works	> 2000000 - 5000000 T annual handing capacity															
Extractive activities	Extractive activities	> 50000 - 100000 T annual capacity to extract or process															
Mining for coal	Mining for coal	> 2000000 - 3500000 T annual production capacity															
A2 Premises or plant to which this licence applies																	
A2.1	<div>The licence applies to the following premises:</div> <div>Premises Details</div> <div>TARRAWONGA COAL MINE</div> <div>469 GOONBRI ROAD</div> <div>BOGGABRI</div> <div>NSW 2382</div> <div>THE LAND APPROVED UNDER PROJECT APPROVAL 11_0047- INDICATED</div> <div>IN APPENDIX 1- SCHEDULE OF LAND OF PROJECT APPROVAL 11_0047 AND SHOWN AS MINE LEASE BOUNDARY ON MAP TITLED "EPL 12365 MONITORING LOCATIONS ONSITE AND OFFSITE" RECEIVED BY THE EPA ON 14 OCTOBER 2019 (DOC19/978674).</div>	Note	Noted	C													
A3 Information supplied to the EPA																	
A3.1	<div>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.</div> <div>In this condition the reference to "the licence application" includes a reference to:</div> <div>(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</div> <div>(b) the licence information form provided by the licensee to the EPA to assist the EPA in connection with the issuing of this licence.</div>	Note	Noted	C													
2 DISCHARGES TO AIR AND WATER AND APPLICATIONS TO LAND																	
P1 Location of monitoring/discharge points and areas																	
P1.1	The following utilisation areas referred to in the table below are identified in this licence for the purposes of the monitoring and/or the setting of limits for any application of solids or liquids to the utilisation area.	Note	Noted	Note													
P1.2	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.	Site observations	Auditor observed sample of EPA ID locations while on Site.	C													

Item	Assessment Requirement				Reference/ Evidence	Comments	Compliance	Recommendations
	Air				Annual Reviews 2017, 2018 and 2019 Annual Return Statement of Compliance 2019 -2020	The auditor sighted the environmental monitoring database and observed monitoring records for a sample of EPA ID locations. Monitoring is conducted at these locations and reported in the AEMR/AR.		
	EPA ID no.	Type of Monitoring Point	Type of Discharge Point	Location Description				
	28	Ambient air monitoring		Real time air quality monitor located on 'Flixton' as shown on map titled "EPL 12365 Monitoring Locations Onsite and Offsite" received by the EPA on 14 October 2019 (DOC19/978674).				
P1.3	The following points referred to in the table are identified in this licence for the purposes of the monitoring and/or the setting of limits for discharges of pollutants to water from the point. Water and land				Site observations Interview with Environment Superintendent EPL12365 Monitoring Locations Map	Auditor reviewed monitoring locations on map. Auditor observed sample of EPA ID locations while on Site and reviewed monitoring records. Interview with Site Environmental Superintendent identified that TB1 was removed and replaced by TB2 (TCM now owns property where TB1 was located) and that SD17 discharge drain which used to drain to Nagero Creek now drains to Boggabri Mine.	C	
	EPA ID no.	Type of monitoring point	Type of discharge point	Location description				
	1	Wet weather discharge Discharge water quality monitoring	Wet weather discharge Discharge water quality monitoring	Discharge point located on the western boundary and labelled 'SD17' on the map titled "EPL 12365 Monitoring Locations Onsite and Offsite" received by the EPA on 14 October 2019 (DOC19/978674).				
	2	Wet weather discharge Discharge water quality monitoring	Wet weather discharge Discharge water quality monitoring	Spillway on Storage Dam 9 located on southern boundary of premises labelled 'SD9' on the map titled "EPL 12365 Monitoring Locations Onsite and Offsite" received by the EPA on 14 October 2019 (DOC19/978674).				
	3	Wet weather discharge Discharge water quality monitoring	Wet weather discharge Discharge water quality monitoring	Spillway on Sediment Basin 14 located on the southern boundary & labelled 'SB14' on the map titled "EPL 12365 Monitoring Locations Onsite and Offsite" received by the EPA on 14 October 2019 (DOC19/978674).				

Item	Assessment Requirement				Reference/ Evidence	Comments	Compliance	Recommendations
5	Ambient water quality monitoring			Bollol Creek upstream of discharge from premises labelled 'BCU' on the map entitled titled "EPL 12365 Monitoring Locations Onsite and Offsite' received by the EPA on 14 October 2019 (DOC19/978674).				
6	Ambient water quality monitoring			Bollol Creek downstream of discharge from premises labelled 'BCD' on the map titled "EPL 12365 Monitoring Locations Onsite and Offsite' received by the EPA on 14 October 2019 (DOC19/978674).				
9	Groundwater monitoring			Groundwater monitoring bore located on property 'Thuin' labelled 'MW1' on the map titled "EPL 12365 Monitoring Locations Onsite and Offsite' received by the EPA on 14 October 2019 (DOC19/978674).				
10	Groundwater monitoring			Groundwater monitoring bore located on property 'Bollol Ck Station' labelled 'MW2' on the map titled EPL 12365 Monitoring Locations Onsite and Offsite' received by the EPA on 14 October 2019 (DOC19/978674).				
12	Groundwater monitoring			Groundwater monitoring bore located on the property 'Tarrawonga' labelled 'MW4' on the map titled "EPL 12365 monitoring Locations Onsite and Offsite' received by the EPA on 14 October 2019 (DOC19/978674).				
13	Surface water quality monitoring			Mining void (variable location) labelled 'Void' on the map titled "EPL 12365 Monitoring Locations Onsite and Offsite' received by the EPA on 14 October 2019 (DOC19/978674).				

Item	Assessment Requirement				Reference/ Evidence	Comments	Compliance	Recommendations						
	24	Wet weather discharge Discharge water quality monitoring	Wet weather discharge Discharge water quality monitoring	Spillway on Storage Dam 16 located on the southern side of the premises labelled 'SD16' on the map titled "EPL 12365 monitoring Locations Onsite and Offsite" received by the EPA on 14 October 2019 (DOC19/978674).										
	26	Wet weather discharge Discharge water quality monitoring	Wet weather discharge Discharge water quality monitoring	Spillway on Sediment Basin 23B located on the south- western side of the premises labelled 'SB23B' on the map titled "EPL 12365 Monitoring Locations Onsite and Offsite" received by the EPA on 14 October 2019 (DOC19/978674).										
	27	Wet weather discharge Discharge water quality monitoring	Wet weather discharge Discharge water quality monitoring	Spillway on Sediment Basin 18 located on south eastern side of premises labelled 'SB24B' on the map titled "EPL 12365 Monitoring Locations Onsite and Offsite" received by the EPA on 19 November 2019 (DOC19/1074186).										
P1.4	The following point(s) in the table are identified in this licence for the purpose of the monitoring of weather parameters at the point. <table><tr><th>EPA ID no.</th><th>Type of Monitoring Point</th><th>Description of Location</th></tr><tr><td>W1</td><td>Weather analysis</td><td>Weather station located on the property 'Templemore' labelled 'W1' on the map entitled 'Figure 2 - EPL 12365 Monitoring Locations Offsite' received by the EPA on 21 April 2016 (DOC16/128744-02).</td></tr></table>				EPA ID no.	Type of Monitoring Point	Description of Location	W1	Weather analysis	Weather station located on the property 'Templemore' labelled 'W1' on the map entitled 'Figure 2 - EPL 12365 Monitoring Locations Offsite' received by the EPA on 21 April 2016 (DOC16/128744-02).	Site observations EPL12365 Monitoring Locations Map	Auditor observed sample of EPA ID locations while on Site and reviewed monitoring records. Monitoring conducted at these locations is reported in the AEMR/AR.	C	
EPA ID no.	Type of Monitoring Point	Description of Location												
W1	Weather analysis	Weather station located on the property 'Templemore' labelled 'W1' on the map entitled 'Figure 2 - EPL 12365 Monitoring Locations Offsite' received by the EPA on 21 April 2016 (DOC16/128744-02).												
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.				Note	Noted	Note							

Item	Assessment Requirement	Reference/ Evidence	Comments	Compliance	Recommendations																								
L2 Concentration Limits																													
L2.1	For each monitoring/discharge point or utilisation area specified in the table/s below (by a point number), the concentration of a pollutant discharged at that point, or applied to that area, must not exceed the concentration limits specified for that pollutant in the table.	Incident notification email to the NSW EPA 20 February 2020 EPL Monitoring Report 01 Jan 2020 EPL Monitoring Report 02 February 2020 EPL Monitoring Report 03 March 2020 EPL Monitoring 04 April 2020 EPL Monitoring Report 05 May 2020 EPL Monitoring Report 06 June 2020 EPL Monitoring 2017, 2018, 2019 Show Cause Letter from the NSW EPA 25 June 2020	TCM had a wet weather discharge event from the EPL ID 3 (SB14) on 8 February 2020. Oil and grease was recorded to be 11mg/L exceeding the 10mg/L limit. The EPA issued a Show Cause on 25 June 2020 and TCM responded on 9 July 2020. TCM is awaiting a response from EPA. The TSS limit was exceeded at EPL ID 1, 2, 3 and 27. However, this was not considered an exceedance, as TSS limits do not apply after more than 38.3mm of rainfall in 5 days preceding the discharge. TCM had a discharge from EPL ID 1 on 21 October 2018. TSS value was recorded to be 3,970. However this was not considered an exceedance as TSS limits do not apply after more than 38.3mm of rainfall in 5 days preceding the discharge	NC	Comply with the direction from EPA with regard to the Show Cause.																								
L2.2	Where a pH quality limit is specified in the table, the specified percentage of samples must be within the specified ranges.	EPL Monitoring Report 01 Jan 2020 EPL Monitoring Report 02 February 2020 EPL Monitoring Report 03 March 2020 EPL Monitoring 04 April 2020 EPL Monitoring Report 05 May 2020 EPL Monitoring Report 06 June 2020 EPL Monitoring 2017, 2018, 2019	Auditor review of EPL monitoring did not identify exceedances of the pH quality limit.	C																									
L2.3	To avoid any doubt, this condition does not authorise the pollution of waters by any pollutant other than those specified in the table/s.	Note	Noted	Note																									
L2.4	Water and/or Land Concentration Limits Point 1,2,3,24,26,27 <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>-</td><td>-</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	-	-	-	50	Note	Noted	Note	
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	-	-	-	50																								

Item	Assessment Requirement	Reference/ Evidence	Comments	Compliance	Recommendations
L2.5	<p>The Total Suspended Solids concentration limits specified for Points 1, 2, 3, 24, 26 and 27 may be exceeded for water discharged provided that:</p> <p>a) the discharge occurs solely as a result of rainfall measured at the premises that exceeds 38.4 millimetres over any consecutive 5 day period immediately prior to the discharge occurring; and</p> <p>b) all practical measures have been implemented to dewater all sediment dams within 5 days of rainfall such that they have sufficient capacity to store run off from a 38.4 millimetre, 5 day rainfall event.</p> <p>Note: 38.4 mm equates to the 5 day 90%ile rainfall depth for Gunnedah sourced from Table 6.3a Managing Urban Stormwater: Soils and Construction Volume 1: 4th edition, March 2004.</p>	<p>Interview with Environmental Superintendent</p> <p>EPL Monitoring Report 02 February 2020</p> <p>Incident Notification Letter from the NSW EPA 20 February 2020</p> <p>Show Cause Letter from the NSW EPA 25 June 2020</p>	<p>TCM had a wet weather discharge event from the EPL ID 3 (SB14) on 8 February 2020. The TSS limit was recorded to be 17,700 mg/L. However, this was not considered an exceedance, as TSS limits do not apply after more than 38.3mm of rainfall in 5 days preceding the discharge.</p> <p>The EPA undertook an investigation of the discharge from LDP 3 (SB14) on 8 February 2020. The EPA's investigation found that the discharge from SB14 may have polluted waters, in that:</p> <ul style="list-style-type: none"> The discharge exceeded licence limit conditions for Oil and Grease, and At the time of discharge the Licensee did not meet all the requirements of condition L2.5, in that it did not appear to take all reasonable steps to ensure that all sediment dams were emptied within 5 days of the last preceding rainfall event. Had this occurred, exceedance of the discharge limits may have been avoided. SB14 discharges into Goonbri Creek, which defined as waters under the Act. <p>Interview with Site Environmental Superintendent indicated TCM is awaiting a final response from the EPA regarding this matter.</p>	NC	Duplicate NC. Refer to L2.1 above
L3 Waste					
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.		No waste generated outside the premises is received at the site.	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.	Note	Noted	Note	
L3.3	Reject material from the Whitehaven CHPP can be disposed of at the premises in accordance with the disposal method outlined in the Environmental Assessment titled 'Tarrawonga Coal Project - Environmental Assessment', prepared by Resource Strategies, or as modified, or as otherwise approved by the EPA.	MOP 2015-2020	Details of emplacement of coal rejects are described in the MOP.	C	

Item	Assessment Requirement					Reference/ Evidence	Comments	Compliance	Recommendations
L4 Noise Limits									
L4.1	Noise generated at the premises must not exceed the noise limits in the table below.					Annual Return Statement of Compliance 2019 – 2020 Annual Review 2019 EPL Monitoring 2019, Table 4 – Quarterly Monitoring	Quarterly attended noise monitoring resulted in one occurrence of the attended monitoring measurement of 42dB (including 2dB Noise Modifying factor applied as per the Noise Policy for Industry) at the ‘Coomalgah’ monitoring point. TCM engaged a separate noise specialist to take supplementary operational noise monitoring. The results showed that throughout the entire period there were no recorded noise non-compliances. TCM is awaiting feedback from EPA with regard to this incident.	NC	Comply with the directions of EPA.
	Locality and Location	Day- LAeq (15 minute)	Evening- LAeq (15 minute)	Night- LAeq (15 minute)	Night- LA1 (1 minute)				
	All other surrounding residences	35	35	35	45				
L4.2	The noise limits identified in the above table do not apply at privately owned residences that are: a) identified as residences subject to acquisition or noise mitigation on request within the Project Approval; or b) subject to a private agreement, relating to the noise levels, between the licensee and the land owner.					Interview with Environmental Superintendent	Interview with the Site Environmental Superintendent did not identify any relevant residences.	NT	
L4.3	For the purpose of the table above: a) Day is defined as the period from 7am to 6pm Monday to Saturday and 8am to 6pm Sundays and Public Holidays; b) Evening is defined as the period from 6pm to 10pm; c) Night is defined as the period from 10pm to 7am Monday to Saturday and 10pm to 8am Sundays and Public Holidays.					Note	Noted	Note	
L4.4	Determining compliance To determine compliance: a) with the Leq(15 minute) noise limits in the Noise Limits table, the noise measurement equipment must be located: i) approximately on the property boundary, where any dwelling is situated 30 metres or less from the property boundary closest to the premises; or ii) within 30 metres of a dwelling façade, but not closer than 3m, where any dwelling on the property is situated more than 30 metres from the property boundary closest to the premises; or, where applicable iii) within approximately 50 metres of the boundary of a National Park or a Nature Reserve. b) with the LA1(1 minute) noise limits in the Noise Limits table, the noise measurement equipment must be located within 1 metre of a dwelling façade. c) with the noise limits in the Noise Limits table, the noise measurement equipment must be located: i) at the most affected point at a location where there is no dwelling at the location; or ii) at the most affected point within an area at a location prescribed by part (a) or part (b) of this condition.					Interview with Environmental Superintendent Site Observations Quarterly Noise Compliance Monitoring June 2020 Noise Management Plan (2015)	Monitoring locations are stated in the Noise Management Plan (2015) and the quarterly monitoring reports. Auditor observed a sample of noise monitoring locations while on Site. Interview with Site Environmental Superintendent indicated that noise monitoring cannot be conducted within 30 m of the residence at night due to privacy concerns. TCM requested a variation to the EPL condition. The EPA advised that this standard condition could not be amended but acknowledged that compliance with this condition could not be met.	C (Obs)	Continue to discuss night-time noise monitoring locations with the EPA.
L4.5	The noise limits set out in the Noise Limits table apply under all meteorological conditions except for the following: a) Wind speeds greater than 3 metres/second at 10 metres above ground level; or					Quarterly Noise Compliance Monitoring December 2019	Auditor review identified weather conditions outlined in the Quarterly Noise Compliance Monitoring 2019. Results Tables in Appendix A record noise measurement results and weather monitoring.	C	

Item	Assessment Requirement	Reference/ Evidence	Comments	Compliance	Recommendations
	b) Stability category F temperature inversion conditions and wind speeds greater than 2 metres/second at 10 metres above ground level; or c) Stability category G temperature inversion conditions. For the purposes of this condition: a) Data recorded by the meteorological station identified as EPA Identification Point(s) W1 must be used to determine meteorological conditions; and b) Temperature inversion conditions (stability category) are to be determined by the sigma-theta method referred to in Part E4 of Appendix E to the NSW Industrial Noise Policy.				
L4.6	For the purposes of determining the noise generated at the premises the modification factors in Section 4 of the NSW Industrial Noise Policy must be applied, as appropriate, to the noise levels measured by the noise monitoring equipment.	Quarterly Noise Compliance Monitoring December 2019	Section 3.4 of the quarterly noise monitoring identifies modifying factors.	C	
L5 Blasting					
L5.1	The overpressure level from blasting operations at the premises must not exceed 120dB (Lin Peak) at any time and at any point within 30 metres of any non project related residential building or other noise sensitive location. 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.	Environmental Blast Monitoring 2017, 2018, 2019, 2020	Auditor reviewed blast monitoring records. No exceedances of 120 dB.	C	
L5.2	The overpressure level from blasting operations at the premises must not exceed 115dB (Lin Peak) for more than five per cent of the total number of blasts over each reporting period at any time and at any point within 30 metres of any non-project related residential building or other noise sensitive location. 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.	Environmental Blast Monitoring 2017, 2018, 2019, 2020	Auditor reviewed blast monitoring records. No exceedances of 115 dB in more than 5% of the total number of blasts at each dwelling.	C	
L5.3	Ground vibration peak particle velocity from the blasting operations at the premises must not exceed 10mm/sec at any time and at any point within 3.5 metres of any non project related residential building or other noise sensitive location. 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.	Environmental Blast Monitoring 2017, 2018, 2019, 2020	Auditor reviewed blast monitoring records. No exceedances of ground vibration of 10mm/s.	C	
L5.4	Ground vibration peak particle velocity from the blasting operations at the premises must not exceed 5mm/sec for more than five per cent of the total number of blasts over each reporting period at any point within 3.5 metres of any non project related residential building or other noise sensitive location. 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.	Environmental Blast Monitoring 2017, 2018, 2019, 2020	Auditor reviewed blast monitoring records. No exceedances of ground vibration of 5mm/s.	C	
L5.5	Blasting operations on the premises must only be carried out between the hours 9am to 5pm, Monday to Saturday, inclusive.	Environmental Blast Monitoring 2017, 2018, 2019, 2020	Auditor reviewed blast monitoring records, no blasts occurred on Sunday. Time of blast was recorded to be 00:00:00 for approximately 60% of blasts in 2018. Time was not recorded for 4 blast events between 18 and 30 May 2020 and one blast even on 14 July 2020. All other blasts were recorded to be carried out between the hours 9am to 5pm.	C (Obs)	Ensure accurate blast time is recorded.
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.	Note	Noted	Note	

Item	Assessment Requirement	Reference/ Evidence	Comments	Compliance	Recommendations
L5.7	<p>Blasting at the premises is limited to 1 blast on each day on which blasting is permitted.</p> <p>Note: Additional blasts are permitted where it is demonstrated to be necessary for safety reasons and the EPA and neighbours have been notified of the intended blast prior to the additional blast being fired.</p> <p>Note: Condition L5.7 does not apply to blasts that generate ground vibration of 0.5mm/s or less at any residence on privately-owned land.</p>	Environmental Blast Monitoring 2017, 2018, 2019, 2020.	Auditor reviewed blast monitoring records, blasts were limited to one per day.	C	
4 Operating Conditions					
O1	Activities must be carried out in a competent manner				
O1.1	<p>Licenced activities must be carried out in a competent manner</p> <p>This includes:</p> <ul style="list-style-type: none"> 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>Site Observations</p> <p>Interview with Environmental Superintendent</p> <p>Penalty Notice 09 April 2020</p>	<p>Good housekeeping was observed. Materials appeared to be appropriately stored and secondary containment was provided as required. The waste storage area appeared well maintained.</p> <p>There is a requirement for all personnel and visitors to complete a general induction, which includes safety and environmental information. Site familiarisation is conducted upon arrival with topics including PPE , hazard awareness, environmental hazards, noise, cultural heritage dust, waste, water, lighting, and restraints. Additional task-specific training is provided to contractors.</p> <p>Competencies are recorded in Pegasus and recorded on a log in sticker, which is required to be worn in a manner that ensure it is visible at all times.</p> <p>Information is passed from the Site Environmental Superintendent to team leaders / managers at the 9am meeting. Information then is passed through to the individual team at toolboxes. Any incidents or enforcements are discussed at the 9am meeting.</p> <p>TCM received a Penalty Notice (09 April 2020) for a contravention of Condition 01 – Failing to undertake activities in a competent manner. The Notice was in relation to the embankment failure at Sediment Dam 2 causing sediment-laden water to discharge from the Site onto Boggabri Coal Mine. TCM self-reported the incident on 10 February 2020. TCM is currently working with environmental professionals to implement water management improvements including staff training, risk assessment, and water pumps.</p> <p>The identified non-compliances recorded against the EPL limits as discussed against other relevant conditions (such as the Penalty Notice discussed above) are not considered reflective of a lack of competence or effect with regard to environmental management.</p>	C	

Item	Assessment Requirement	Reference/ Evidence	Comments	Compliance	Recommendations
O2	Maintenance of plant and equipment				
O2.1	All plant and equipment installed at the premises or used in connection with the licensed activity: a) must be maintained in a proper and efficient condition; and b) must be operated in a proper and efficient manner.	Site Observations Show Cause Letter from the NSW EPA 25 June 2020	During the Site inspection, no observations were made of unmaintained or inappropriately operated equipment. The EPA undertook an investigation into the discharge of sediment laden water from sediment dam SB 14 on or around 8 February 2020. The EPA's investigation found that the discharge from SB14 may have polluted waters, in that the licensee appears to have failed to maintain and operate SB14 in a proper and efficient manner prior to the discharge on the 8 February 2020. Interview with Site Environmental Superintendent indicated TCM is awaiting a final response from the EPA regarding this matter. TCM is currently working with environmental professionals to implement water management improvements including staff training, risk assessment, and water pumps.	NC	Duplicate NC. Refer above
O3	Dust				
O3.1	All operations and activities occurring at the premises must be carried out in a manner that will minimise the emission of dust from the premises.	Interview with Environmental Superintendent Site Observations	Dust suppression is provided through water carts, and HydroTac dust-a-side (sugar cane molasses) used when needed. Water spray is used on the conveyor from the crusher.	C	
O3.2	Trucks transporting coal from the premises must be covered immediately after loading to prevent wind-blown emissions and spillage. The covering must be maintained until immediately before unloading the trucks.	Site Observations	Auditors observed trucks leaving the Site with covers.	C	
O4	Other operating conditions Blast Fume				
O4.1	Offensive blast fume must not be emitted from the premises. Definition: <i>Offensive blast fume</i> 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.	Interview with Environmental Superintendent Blast Management Plan 2015 2020 Complaints Register 2019 Complaints Register 2018 Complaints Register 2017 Complaints Register	No complaints relating to blast fume were identified during the audit period. Interview with Site Environmental Superintendent indicated no blast fumes above 3A /B. Environmental conditions are reviewed prior to blasting as per blast management plan.	C	
Pollution Incident Response Management Plan					
O4.2	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.	Pollution Incident Response Management Plan 2020	PIRMP current (last update 2020). Current version on website.	C	

Item	Assessment Requirement	Reference/ Evidence	Comments	Compliance	Recommendations																
O4.3	The licensee must keep the PIRMP on the premises at all times.	Site Observations	PIRMP on noticeboard on breezeway and in the office in the Red Folder	C																	
5 Monitoring and Recording Conditions																					
M1	Monitoring records																				
M1.1	The results of any monitoring required to be conducted by this licence or a load calculation protocol must be recorded and retained as set out in this condition.	EPL Monthly Monitoring Data on https://whitehavencoal.com.au/our-business/our-assets/tarrawonga-mine/	The auditor reviewed the web address below and determined that it demonstrates all recorded monthly monitoring data. https://whitehavencoal.com.au/our-business/our-assets/tarrawonga-mine/	C																	
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.	EPL Monthly Monitoring Data on https://whitehavencoal.com.au/our-business/our-assets/tarrawonga-mine/	The monthly monitoring data recorded on the Whitehaven website demonstrated the four year retaining of information requirement (records available from 2014) and was legible in pdf format.	C																	
M1.3	The following records must be kept in respect of any samples required to be collected for the purposes of this licence: d) the date(s) on which the sample was taken; e) the time(s) at which the sample was collected; f) the point at which the sample was taken; and g) the name of the person who collected the sample.	COC from ALS 6 March 2020 and 5 April 2020 HVAS sampling Groundwater 11 September 2019 Dust COC 16 April 2020 Surface water COC May 2020 Noise monitoring reports	The auditor reviewed a sample of noise monitoring reports and certificates of conformity (COC) for HVAS, groundwater, dust, and surface water. The review identified that a record of the sample date, sample time, sample point, and name of the person who collected the sample are kept.	C																	
M2	Requirement to monitor concentration of pollutants discharged																				
M2.1	For each monitoring/discharge point or utilisation area specified below (by a point number), the licensee must monitor (by sampling and obtaining results by analysis) the concentration of each pollutant specified in Column 1. The licensee must use the sampling method, units of measure, and sample at the frequency, specified opposite in the other columns:	Note	Noted	Note																	
M2.2	Air monitoring requirements Point 28 <table><tr><th>Pollutant</th><th>Units of measure</th><th>Frequency</th><th>Sampling method</th></tr><tr><td>PM10</td><td>micrograms per cubic metre</td><td>Continuous</td><td>AM-22</td></tr></table>	Pollutant	Units of measure	Frequency	Sampling method	PM10	micrograms per cubic metre	Continuous	AM-22	Annual Return Non-Compliance Detail 2017 – 2018 Annual Return Non-Compliance Detail 2018 – 2019 Annual Return Statement of Compliance 2019 – 2020 Letter from NSW EPA	The requirement for continuous monitoring was reportedly not met due to temporary outages as a result of technical issues such as internet drop out or temporary instrument failure. ERM reviewed a letter from EPA confirming that 90% data capture is compliant with the condition.	C									
Pollutant	Units of measure	Frequency	Sampling method																		
PM10	micrograms per cubic metre	Continuous	AM-22																		
M2.3	Water and/or Land Monitoring Requirements Point 1,2,3,24,26,27 <table><tr><th>Pollutant</th><th>Units of measure</th><th>Frequency</th><th>Sampling method</th></tr><tr><td>Conductivity</td><td>microsiemens per centimetre</td><td>Special Frequency 1</td><td>Grab sample</td></tr><tr><td>Oil and grease</td><td>pH</td><td>Special Frequency 1</td><td>Grab sample</td></tr><tr><td>pH</td><td>pH</td><td>Special Frequency 1</td><td>Grab sample</td></tr></table>	Pollutant	Units of measure	Frequency	Sampling method	Conductivity	microsiemens per centimetre	Special Frequency 1	Grab sample	Oil and grease	pH	Special Frequency 1	Grab sample	pH	pH	Special Frequency 1	Grab sample	Annual Return Non-Compliance Detail 2017 – 2018 Annual Return Non-Compliance Detail 2018 – 2019 Annual Return Statement of Compliance 2019 – 2020	Auditor review of statement of compliance report (2019 – 2020) and annual return non-compliance detail (2017 – 2018, 2018 – 2019) identified that during the reporting period of the audit, no non-compliances were recorded.	C	
Pollutant	Units of measure	Frequency	Sampling method																		
Conductivity	microsiemens per centimetre	Special Frequency 1	Grab sample																		
Oil and grease	pH	Special Frequency 1	Grab sample																		
pH	pH	Special Frequency 1	Grab sample																		

Item	Assessment Requirement				Reference/ Evidence	Comments	Compliance	Recommendations																				
	<table><tr><td>Total suspended solids</td><td>Milligrams per litre</td><td>Special Frequency 1</td><td>Grab sample</td></tr></table>				Total suspended solids	Milligrams per litre	Special Frequency 1	Grab sample																				
	Total suspended solids	Milligrams per litre	Special Frequency 1	Grab sample																								
	Point 5,6																											
	<table><tr><th>Pollutant</th><th>Units of measure</th><th>Frequency</th><th>Sampling method</th></tr><tr><td>Conductivity</td><td>microsiemens per centimetre</td><td>Special Frequency 1</td><td>Grab sample</td></tr><tr><td>Oil and grease</td><td>Milligrams per litre</td><td>Special Frequency 1</td><td>Grab sample</td></tr><tr><td>pH</td><td>pH</td><td>Special Frequency 1</td><td>Grab sample</td></tr><tr><td>Total suspended solids</td><td>Milligrams per litre</td><td>Special Frequency 1</td><td>Grab sample</td></tr></table>				Pollutant	Units of measure	Frequency	Sampling method					Conductivity	microsiemens per centimetre	Special Frequency 1	Grab sample	Oil and grease	Milligrams per litre	Special Frequency 1	Grab sample	pH	pH	Special Frequency 1	Grab sample	Total suspended solids	Milligrams per litre	Special Frequency 1	Grab sample
	Pollutant	Units of measure	Frequency	Sampling method																								
	Conductivity	microsiemens per centimetre	Special Frequency 1	Grab sample																								
	Oil and grease	Milligrams per litre	Special Frequency 1	Grab sample																								
	pH	pH	Special Frequency 1	Grab sample																								
	Total suspended solids	Milligrams per litre	Special Frequency 1	Grab sample																								
	Point 9,10,12																											
	<table><tr><th>Pollutant</th><th>Units of measure</th><th>Frequency</th><th>Sampling method</th></tr><tr><td>Conductivity</td><td>microsiemens per centimetre</td><td>Every 6 months</td><td>Grab sample</td></tr><tr><td>Lead</td><td>Milligrams per litre</td><td>Every 6 months</td><td>Grab sample</td></tr><tr><td>pH</td><td>pH</td><td>Every 6 months</td><td>Grab sample</td></tr><tr><td>Standing Water Level</td><td>Metres</td><td>Every 6 months</td><td>In situ</td></tr></table>				Pollutant	Units of measure	Frequency	Sampling method					Conductivity	microsiemens per centimetre	Every 6 months	Grab sample	Lead	Milligrams per litre	Every 6 months	Grab sample	pH	pH	Every 6 months	Grab sample	Standing Water Level	Metres	Every 6 months	In situ
	Pollutant	Units of measure	Frequency	Sampling method																								
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	Lead	Milligrams per litre	Every 6 months	Grab sample																								
	pH	pH	Every 6 months	Grab sample																								
	Standing Water Level	Metres	Every 6 months	In situ																								
	Point 13																											
	<table><tr><th>Pollutant</th><th>Units of measure</th><th>Frequency</th><th>Sampling method</th></tr><tr><td>Conductivity</td><td>microsiemens per centimetre</td><td>Quarterly</td><td>Grab sample</td></tr><tr><td>Oil and grease</td><td>Milligrams per litre</td><td>Quarterly</td><td>Grab sample</td></tr><tr><td>pH</td><td>pH</td><td>Quarterly</td><td>Grab sample</td></tr><tr><td>Total suspended solids</td><td>Milligrams per litre</td><td>Quarterly</td><td>Grab sample</td></tr></table>				Pollutant	Units of measure	Frequency	Sampling method					Conductivity	microsiemens per centimetre	Quarterly	Grab sample	Oil and grease	Milligrams per litre	Quarterly	Grab sample	pH	pH	Quarterly	Grab sample	Total suspended solids	Milligrams per litre	Quarterly	Grab sample
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	pH	pH	Quarterly	Grab sample																								
	Total suspended solids	Milligrams per litre	Quarterly	Grab sample																								
M2.4	For the purposes of the table(s) above Special Frequency 1 means the collection of samples as soon as practicable after a discharge from points 1, 2, 3, 24, 26, and 27 commences and in any case not more than 12 hours after a discharge commences.				Interview with Environmental Superintendent Wet Weather Discharge Results Register	Date and time of identification of discharge and collection of samples is recorded through photos. It is also recorded in the Wet Weather Discharge Results Register and the notification to the EPA. Auditor review of the register identified that the discharge from SD17 on 21 October 2018 was identified on the date that the sample was taken. TCM plan to install real time monitoring of water levels with attached camera during FY21.	C																					

Item	Assessment Requirement	Reference/ Evidence	Comments	Compliance	Recommendations																									
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> <p>a) any methodology which is required by or under the Act to be used for the testing of the concentration of the pollutant; or</p> <p>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</p> <p>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.</p> <p>Note: The <i>Protection of the 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> <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> <p>a) any methodology which is required by or under the Act to be used for the testing of the concentration of the pollutant; or</p> <p>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</p> <p>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.</p>	Annual Return Non-Compliance Detail 2017 – 2018 Real Time Air Quality Monitoring Data in Sentinex	TCM incorrectly reported that real time air quality monitor does not meet AM-22 in their 2017 – 2018 Annual Return leading to a non-compliance. The auditor reviewed real time monitoring for PM10 and PM2.5	C																										
M3.2	<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>Note: The <i>Protection of the 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>	ALS Reports	NSW EPA approved methodology used by ALS regarding water monitoring and analysis in June 2018.	C																										
M4 Weather Monitoring																														
M4.1	<p>For each monitoring point specified in the table below the licensee must monitor (by sampling and obtaining results by analysis) the parameters specified in Column 1. The licensee must use the sampling method, units of measure, averaging period and sample at the frequency, specified opposite in the other columns.</p> <p>Point W1</p> <table><tr><th>Parameter</th><th>Units of Measure</th><th>Frequency</th><th>Averaging Period</th><th>Sampling Method</th></tr><tr><td>Temperature @ 2 metres</td><td>°C</td><td>Continuous</td><td>15 minute</td><td>AM-4</td></tr><tr><td>Wind direction @ 10 metres</td><td>°</td><td>Continuous</td><td>15 minute</td><td>AM-2 & AM-4</td></tr><tr><td>Wind speed @ 10 metres</td><td>m/s</td><td>Continuous</td><td>15 minute</td><td>AM-2 & AM-4</td></tr><tr><td>Sigma theta @ 10</td><td>°</td><td>Continuous</td><td>15 minute</td><td>AM-2 & AM-4</td></tr></table>	Parameter	Units of Measure	Frequency	Averaging Period	Sampling Method	Temperature @ 2 metres	°C	Continuous	15 minute	AM-4	Wind direction @ 10 metres	°	Continuous	15 minute	AM-2 & AM-4	Wind speed @ 10 metres	m/s	Continuous	15 minute	AM-2 & AM-4	Sigma theta @ 10	°	Continuous	15 minute	AM-2 & AM-4	Annual Return Non-Compliance Detail 2017 – 2018, 2018 – 2019, 2019 – 2020 EPA Letter	TCM incorrectly reported a non-compliance with this condition due to temporary outages as a result of technical issues such as internet drop out or temporary instrument failure. The auditor sighted a letter from EPA confirming that 90% data capture is compliant with the condition.	C	
Parameter	Units of Measure	Frequency	Averaging Period	Sampling Method																										
Temperature @ 2 metres	°C	Continuous	15 minute	AM-4																										
Wind direction @ 10 metres	°	Continuous	15 minute	AM-2 & AM-4																										
Wind speed @ 10 metres	m/s	Continuous	15 minute	AM-2 & AM-4																										
Sigma theta @ 10	°	Continuous	15 minute	AM-2 & AM-4																										

Item	Assessment Requirement					Reference/ Evidence	Comments	Compliance	Recommendations
	metres								
	Rainfall	mm/h	Continuous	1 hour	AM-4				
	Solar Radiation	W/m2	Continuous	15 minute	AM-4				
	Temperature @ 10 metres	°C	Continuous	15 minute	AM-4				
	Additional requirements - Siting - Measurement				AM-1 & AM-4 AM-2 & AM-4				
M4.2	The meteorological weather station must be maintained so as to be capable of continuously monitoring the parameters specified in this section.					Interview with Environmental Superintendent Sentinex Reports	Interview with Site Environmental Superintendent indicates Novicom maintains the weather station. Auditor reviewed reports available in Sentinex and identified the last service as wind tunnel calibration on 7 April 2020 (report date). 12M maintenance checked all sensors on 10 March 2020. All passed.	C	


M5 Recording of pollution complaints

M5.1	The licensee must keep a legible record of all complaints made to the licensee or any employee or agent of the licensee in relation to pollution arising from any activity to which this licence applies.					Complaints Register	Complaints Register held online dating back to 2014. No complaints since 2017.	C	
M5.2	The record must include details of the following: a) the date and time of the complaint; b) the method by which the complaint was made; c) any personal details of the complainant which were provided by the complainant or, if no such details were provided, a note to that effect; d) the nature of the complaint; e) the action taken by the licensee in relation to the complaint, including any follow-up contact with the complainant; and f) if no action was taken by the licensee, the reasons why no action was taken.					Complaints Register	Complaints Register held online includes the date, time, nature, and method of the complaint, and the investigation and action taken.	C	
M5.3	The record of a complaint must be kept for at least 4 years after the complaint was made.					Complaints Register	Complaints Register held online dates back to 2014.	C	
M5.4	The record must be produced to any authorised officer of the EPA who asks to see them.					Note	Noted	NT	

M6 Telephone complaints line

M6.1	The licensee must operate during its operating hours a telephone complaints line for the purpose of receiving any complaints from members of the public in relation to activities conducted at the premises or by the vehicle or mobile plant, unless otherwise specified in the licence.					https://whitehavencoal.com.au/our-business/our-assets/tarrawonga-mine/	Number displayed on website. Tested during audit.	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.					https://whitehavencoal.com.au/our-business/our-assets/tarrawonga-mine/	Number displayed on website.	C	
M6.3	The preceding two conditions do not apply until 3 months after: the date of the issue of this licence.					Note	Noted	Note	

Item	Assessment Requirement	Reference/ Evidence	Comments	Compliance	Recommendations												
M7 Other noise monitoring and recording conditions																	
M7.1	<div>For each monitoring point specified below, the Licensee must monitor the noise or vibration parameter 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.</div> <div>Points: TN2, TN3, TN4</div> <table><tr><th>Parameter</th><th>Units of Measure</th><th>Frequency</th><th>Sampling Method</th></tr><tr><td>Ambient Noise</td><td>LAeq (15 minute) LAmax LA1 LA10 LA90 LAmin</td><td>Quarterly</td><td>As detailed in the most recently approved Noise Management Plan" for the premises.</td></tr></table>	Parameter	Units of Measure	Frequency	Sampling Method	Ambient Noise	LAeq (15 minute) LAmax LA1 LA10 LA90 LAmin	Quarterly	As detailed in the most recently approved Noise Management Plan" for the premises.	Annual Return Statement of Compliance 2019 – 2020 Quarterly Noise Compliance Monitoring March 2020 Quarterly Noise Compliance Monitoring June 2020 Quarterly Noise Compliance Monitoring September 2019 Quarterly Noise Compliance Monitoring December 2019 Noise Management Plan 2015	TCM has previously reported a technical non-compliance with real time noise monitor (N2) not continuously monitoring noise levels due to downtimes (>0.1%) due to periodic maintenance or communication failure resulting in minor data gaps. EPA has subsequently confirmed that 90% data capture complies with this condition.	C					
Parameter	Units of Measure	Frequency	Sampling Method														
Ambient Noise	LAeq (15 minute) LAmax LA1 LA10 LA90 LAmin	Quarterly	As detailed in the most recently approved Noise Management Plan" for the premises.														
M7.2	<div>Points: TB2</div> <table><tr><th>Parameter</th><th>Units of Measure</th><th>Frequency</th><th>Sampling Method</th></tr><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></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	Annual Return Statement of Compliance 2019 – 2020 Annual Return Non-Compliance Detail 2019 - 2020	A non-compliance was reported in 2017 as the field location reportedly did not align with the location listed in the EPL. This has been addressed in the variation of EPL12365 approved in January 2020.	C	
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														
M7.3	<div>For the purpose of conditions M7.1, M7.2 and M7.3 the monitoring locations are described as:</div> <table><tr><th>EPA ID No.</th><th>Description of Location</th></tr><tr><td>N2</td><td>Portable monitor</td></tr><tr><td>TN2</td><td>Within 30 metres of the 'Matong' property boundary as shown within 30 metres of the 'Matong' property boundary as shown on the map entitled "EPL12365 Monitoring Locations Onsite and Offsite" received by EPA on 14 October 2019 (DOC19/978674).</td></tr><tr><td>TN3</td><td>Within 30 metres of the residence on the property 'Barbers Lagoon' as shown on the map entitled "EPL12365 Monitoring Locations Onsite and Offsite" received by EPA on 14 October 2019 (DOC19/978674).</td></tr><tr><td>TN4</td><td>Within 30 metres of the residence on the property 'Bungalow' as shown on the map entitled “EPL12365 Monitoring Locations Onsite and Offsite" received by EPA on 14 October 2019 (DOC19/978674).</td></tr><tr><td>TB2</td><td>Within 30 metres of the residence on the property</td></tr></table>	EPA ID No.	Description of Location	N2	Portable monitor	TN2	Within 30 metres of the 'Matong' property boundary as shown within 30 metres of the 'Matong' property boundary as shown on the map entitled "EPL12365 Monitoring Locations Onsite and Offsite" received by EPA on 14 October 2019 (DOC19/978674).	TN3	Within 30 metres of the residence on the property 'Barbers Lagoon' as shown on the map entitled "EPL12365 Monitoring Locations Onsite and Offsite" received by EPA on 14 October 2019 (DOC19/978674).	TN4	Within 30 metres of the residence on the property 'Bungalow' as shown on the map entitled “EPL12365 Monitoring Locations Onsite and Offsite" received by EPA on 14 October 2019 (DOC19/978674).	TB2	Within 30 metres of the residence on the property	Site Observations	The auditor observed a sample of noise monitoring locations in the field. Monitoring locations are stated in the NMP and in quarterly monitoring reports. Interview with Site Environmental Superintendent indicated that noise monitoring cannot be conducted within 30 m of the residence at night. TCM requested a variation to the EPL condition, however, this was not approved.	NC	Duplicate NC. Refer above
EPA ID No.	Description of Location																
N2	Portable monitor																
TN2	Within 30 metres of the 'Matong' property boundary as shown within 30 metres of the 'Matong' property boundary as shown on the map entitled "EPL12365 Monitoring Locations Onsite and Offsite" received by EPA on 14 October 2019 (DOC19/978674).																
TN3	Within 30 metres of the residence on the property 'Barbers Lagoon' as shown on the map entitled "EPL12365 Monitoring Locations Onsite and Offsite" received by EPA on 14 October 2019 (DOC19/978674).																
TN4	Within 30 metres of the residence on the property 'Bungalow' as shown on the map entitled “EPL12365 Monitoring Locations Onsite and Offsite" received by EPA on 14 October 2019 (DOC19/978674).																
TB2	Within 30 metres of the residence on the property																

Item	Assessment Requirement	Reference/ Evidence	Comments	Compliance	Recommendations
	<div>  <p>Coomalgalah as shown on the map entitled "EPL12365 Monitoring Locations Onsite and Offsite" received by EPA on 14 October 2019 (DOC19/978674).</p> </div> <p>Note: Point N2 is a portable monitor enabling the monitor to be relocated to areas of potential greatest impact. The licensee is responsible to ensure that it is located at the most suitable location.</p> <p>Note: The location, frequency of monitoring and the parameters to be monitored may be varied by the EPA once the variability of the noise impact is established.</p>				
M7.4	<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"> at each one of the monitoring locations TN2, TN3 and TN4; occur Quarterly in a reporting period; 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"> 1.5 hours during the day; 30 minutes during the evening; and 1 hour during the night. occur for three consecutive operating days. 	Quarterly Noise Compliance Monitoring June 2020	Auditor review of report identified that all requirements are met.	C	

6 Reporting Conditions

R1 Annual return documents

R1.1	<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"> a Statement of Compliance, a Monitoring and Complaints Summary, a Statement of Compliance - Licence Conditions, a Statement of Compliance - Load based Fee, a Statement of Compliance - Requirement to Prepare Pollution Incident Response Management Plan, a Statement of Compliance - Requirement to Publish Pollution Monitoring Data; and a Statement of Compliance - Environmental Management Systems and Practices. <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>	POEO Public Register	Auditor reviewed the POEO Public Register and verified that Annual Returns were submitted for the audit period (2017 – 2020).	C	
R1.2	An Annual Return must be prepared in respect of each reporting period, except as provided below.	Note	Noted	Note	
R1.3	<p>Where this licence is transferred from the licensee to a new licensee:</p> <ol style="list-style-type: none"> 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 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	Noted	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:	Note	Noted	NT	

TABLE A2 - EPL

Compliance with Environment Protection Licence (EPL) 12635

Item	Assessment Requirement	Reference/ Evidence	Comments	Compliance	Recommendations
	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.				
R1.5	The Annual Return for the reporting period must be supplied to the EPA via eConnect <i>EPA</i> or by registered post not later than 60 days after the end of each reporting period or in the case of a transferring licence not later than 60 days after the date the transfer was granted (the 'due date').	POEO Public Register	ERM review the Annual Return received date on the POEO Public Register and verified the Annual Returns were received not later than 60 days after the end of each reporting period for the audit period.	C	
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 Return submissions 2016 to 2019	Copies of annual returns from 2016 were available.	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. 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. Note: An application to transfer a licence must be made in the approved form for this purpose.	Annual Return Statement of Compliance 2019 – 2020	Auditor sighted the Annual Return Statement of Compliance 2019 – 2020 and verified that it was certified by the Site Environment Superintendent.	C	
R2 Notification of environmental harm					
R2.1	Notifications must be made by telephoning the Environment Line service on 131 555.	Incident and Exceedance Register	All exceedances recorded on the Incident and Exceedance Register were reported to the EPA.	C	
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. 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.	Incident notification (SD2) email to the EPA 10 February 2020 Email to the EPA with Environmental Event Report (SD2) attached 17 February 2020 Incident notification (SB14) email to the EPA 20 February 2020 Email to the EPA with Environmental Event Report (SB14) attached 27 February 2020	A discharge occurred from Dam SD2 on 10 February 2020. An incident notification email was sent to the EPA on 10 February 2020. An Environmental Event Report was sent to the EPA on 17 February 2020. An oil and grease exceedance was recorded at SB14 on 8 February 2020. TCM advised the EPA of the exceedance via email on 20 February 2020 (when the water quality results were received). TCM sent an Environmental Event Report on 27 February 2020.	C	
R3 Written Report					
R3.1	Where an authorised officer of the EPA suspects on reasonable grounds that: a) where this licence applies to premises, an event has occurred at the premises; or b) where this licence applies to vehicles or mobile plant, an event has occurred in connection with the carrying out of the activities authorised by this licence, and the event has caused, is causing or is likely to cause material harm to the environment (whether the harm occurs on or off premises to which the licence applies), the authorised officer may request a written report of the event.	Incident notification (SD2) email to the EPA 10 February 2020 Email to the EPA with Environmental Event Report (SD2) attached 17 February 2020 Notice to provide information (SD2) email from the EPA 03 March 2020 Email to the EPA in response to notice (SD2) 17 March 2020 Penalty Notice (SD2) 09 April 2020	A discharge occurred from Dam SD2 on 10 February 2020. An incident notification was sent to the EPA on 10 February 2020. An Environmental Event Report was sent to the EPA on 17 February 2020. TCM was issued a s191 notice to provide information no later than 17 March 2020. TCM sent a response to the notice on 17 March 2020. TCM was issued a Penalty Notice (09 April 2020) for contravention of Condition 01 – Failing to undertake activities in a competent manner and ordered to pay \$15,000.00 by 07 May 2020.	C	

Item	Assessment Requirement	Reference/ Evidence	Comments	Compliance	Recommendations
		Incident notification (SB14) email to the EPA 20 February 2020 Email to the EPA with Environmental Event Report (SB14) attached 27 February 2020 Email to the EPA in response to notice (SB12) 29 April 2020. Show Cause Letter (SB14) from the EPA 25 June 2020	An oil and grease exceedance was recorded at SB14 on 8 February 2020. TCM advised the EPA of the exceedance via email on 20 February 2020 (when the water quality results were received). TCM sent an Environmental Event Report on 27 February 2020. A s191 notice was sent to TCM on 3 April 2020 and responded to by TCM on 29 April 2020. The EPA sent TCM a show cause letter on 25 June 2020 to be responded to no later than on 9 July 2020. A response to the show cause letter was sent to the EPA on 9 July 2020. .		
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.	As above	Refer above		
R3.3	The request may require a report which includes any or all of the following information: a) the cause, time and duration of the event; b) the type, volume and concentration of every pollutant discharged as a result of the event; c) the name, address and business hours telephone number of employees or agents of the licensee, or a specified class of them, who witnessed the event; d) the name, address and business hours telephone number of every other person (of whom the licensee is aware) who witnessed the event, unless the licensee has been unable to obtain that information after making reasonable effort; e) action taken by the licensee in relation to the event, including any follow-up contact with any complainants; f) details of any measure taken or proposed to be taken to prevent or mitigate against a recurrence of such an event; and g) any other relevant matters.	As above	Refer above		
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.	As above	Refer above		
R4 Other reporting conditions					
R4.1	A noise compliance assessment report must be submitted to the EPA within thirty (30) days of the completion of the quarterly noise monitoring. The assessment must be prepared by a suitably qualified and experienced acoustical consultant and include: a) an assessment of compliance with noise limits detailed in the limit conditions of this licence; and b) an outline of any management actions taken within the monitoring period to address any exceedances of the limits detailed in the limit conditions of this licence.	Annual Return Non-Compliance Detail 2017 – 2018	Last quarterly attended noise monitoring report for 2017 was not submitted within 30 days of completion of monitoring.	NC	Historic NC. No further action required.
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.	Environmental Blast Monitoring 2017, 2018, 2019, 2020	No exceedances of blasting criteria.	C	

TABLE A2 - EPL
Compliance with Environment Protection Licence (EPL) 12635

Item	Assessment Requirement	Reference/ Evidence	Comments	Compliance	Recommendations
7 General Conditions					
G1	Copy of licence kept at the premises or plant				
G.1.1	A copy of this licence must be kept at the premises to which the licence applies.	Site Observations	Hard copy of EPL 12365 kept in folder in office.	C	
G1.2	The licence must be produced to any authorised officer of the EPA who asks to see it.	Note	Noted	Note	
G1.3	The licence must be available for inspection by any employee or agent of the licensee working at the premises.	Note	Noted	Note	

TABLE A3 – MINING LEASE 1579
COMPLIANCE WITH MINING LEASE 1579

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
Mining Lease Conditions 2004					
Notice to Landholders					
1.	<p>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>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.</p> <p>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>	Interview with Environmental Superintendent	Not related to this audit period	NT	
Mining, Rehabilitation, Environmental Management Process (MREMP) Mining Operations Plan (MOP)					
2. 1a	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:- ongoing mining operations and environmental	Interview with Environmental Superintendent Mining Operations Plan (2015-2020) (Amendment E) (TCPL 2019)	<p>The Director-General satisfaction of performance is gained though the approval of the MOP (2015-2020) (TCPL 2019). Director-General acceptance of performance against the MOP reported in Annual Reviews.</p> <p>Based on the auditor's inspection, mining operations appear to be in accordance with the approved MOP. Refer to CoA.</p>	C	

TABLE A3 – MINING LEASE 1579
COMPLIANCE WITH MINING LEASE 1579

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
2.1b	management; and ongoing monitoring of the project.	Mining Operations Plan (2015-2020) (Amendment E) (TCPL 2019) Rehabilitation Flora and Fauna Monitoring for Tarrawonga Mine – Spring 2017 (Letter from ELA 22 February 2018) Rehabilitation Monitoring Report 2018 – Volume 1 (ELA 5 August 2020) Tarrawonga Mine Spring Monitoring 2019 (ELA 20 December 2019) Annual Review 2019	Evidence that woodland rehabilitation monitoring is occurring is available through annual spring monitoring (Letter from ELA 22 February 2018, ELA 5 August 2020, ELA 20 December 2019). According to the MOP, Flora and Fauna (including weeds and pests) will be monitored in accordance with the Stage 1 Biodiversity Management Plan (Whitehaven 2015b). Evidence of monitoring results are reported in the Annual Review (2019) Section 6.4. Refer to Biodiversity Audit Report.	C	
2.2	The Plan must be prepared in accordance with the Director-General's guidelines current at the time of lodgment.	Mining Operations Plan (2015-2020) (Amendment E) (TCPL 2019)	Mining Operations Plan (2015-2020) (Amendment E) (TCPL 2019) Section 1 states that the document was prepared in accordance with the Mining Operations Plan (MOP) Guidelines (DTIRIS 2013).	C	

TABLE A3 – MINING LEASE 1579
COMPLIANCE WITH MINING LEASE 1579

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
2.3a	A Plan must be lodged with the Director-General:- (a) prior to the commencement of mining operations (including mining purposes);	Mining Operations Plan (2015-2020) (Amendment E) (TCPL 2019)	Timing of condition predates this audit period.	C	
2.3b	subsequently as appropriate prior to the expiry of any current Plan; and	Mining Operations Plan (2015-2020) (Amendment E) (TCPL 2019)	TCM was required to update MOP amendment C to report on progress against rehabilitation undertakings by 1 April 2019. TCM submitted amendment D on 15 March 2019. Amendment D was approved on 12 April 2019. The DRG issued a caution letter to TCM for continuing operations between the 2 and 11 April 2019 without an approved MOP. Amendment E was lodged on the 19 December 2019.	NC	Historic NC. No further action required.
2.3c	in accordance with any direction issued by the Director- General.	Section 240 Notice (Resources Regulator DPIE 18 April 2019) Acknowledgement of email (Email from the Resources Regulator 18 May 2020)	TCM received a Section 240 Notice (Resources Regulator DPIE 18 April 2019) directing TCM to (1) prepare and submit a <i>Tarrawonga Coal Mine Rehabilitation Report</i> by 29 November 2019, (2) prepare and submit a draft version on the Report by 23 September 2019, and (3) submit the	C	

TABLE A3 – MINING LEASE 1579
COMPLIANCE WITH MINING LEASE 1579

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
			names and relevant qualifications of the proposed person(s) to be engaged to prepare the Report by 30 May 2019. Evidence that direction 3 was satisfactorily completed is included in the Notice. TCM received an email (Resources Regulator 18 May 2020) acknowledging that the Report was received on 29 November 2019.		
2.4a	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:- area(s) proposed to be disturbed under the Plan;	Mining Operations Plan (2015-2020) (Amendment E) (TCPL 2019)	MOP (2015-2020) (TCPL 2019) details rehabilitation planning (Section 5), implementation (Section 7) and MOP Plans 3(a-f) (annual timeslices) and 4 (post mining landuse) Section 2.3.10 contains a table showing the material production schedule for six years.	C	
2.4b	mining and their rehabilitation methods(s) to be used and their sequence;	Mining Operations Plan (2015-2020) (Amendment E) (TCPL 2019)	MOP (2015-2020) (TCPL 2019) details rehabilitation planning (Section 5) and implementation (Section 7).	C	

TABLE A3 – MINING LEASE 1579
COMPLIANCE WITH MINING LEASE 1579

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
2.4c	areas to be used for disposal of tailings/waste;	Mining Operations Plan (2015-2020) (Amendment E) (TCPL 2019)	MOP (2015-2020) (TCPL 2019) details rehabilitation planning (Section 5), implementation (Section 7) and MOP Plans 3(a-f) (annual timeslices) and 4 (post mining landuse)	C	
2.4d	existing proposed surface infrastructure;	Mining Operations Plan (2015-2020) (Amendment E) (TCPL 2019)	MOP (2015-2020) (TCPL 2019) details rehabilitation planning (Section 5), implementation (Section 7) and MOP Plans 3(a-f) (annual timeslices) and 4 (post mining landuse)	C	
2.4e	existing flora and fauna on the site;	MOP Revision F – to be submitted	Updated plans identifying existing flora and fauna have been included in MOP Revision F (Plans 4B, C and D).	C	
2.4f	progressive rehabilitation schedules;	Mining Operations Plan (2015-2020) (Amendment E) (TCPL 2019)	MOP (2015-2020) (TCPL 2019) details rehabilitation planning (Section 5), implementation (Section 7) and MOP Plans 3(a-f) (annual timeslices) and 4 (post mining landuse)	C	
2.4g	areas of particular environment, ecological and cultural sensitivity and measures to protect these areas;	MOP Revision F – to be submitted	Updated plans identifying areas of environmental, ecological or cultural sensitivity have been included in MOP Revision F (Plans 4B, C and D).	C	

TABLE A3 – MINING LEASE 1579
COMPLIANCE WITH MINING LEASE 1579

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
2.4h	water management systems (including erosion and sediment controls)	Mining Operations Plan (2015-2020) (Amendment E) (TCPL 2019)	MOP (2015-2020) (TCPL 2019) MOP Plans 3(a – f) show water management structures.	C	
2.4i	proposed resource recovery; and	Mining Operations Plan (2015-2020) (Amendment E) (TCPL 2019)	Resource recovery described in MOP (2015-2020) (TCPL 2019) Section 2.3.3.	C	
2.4j	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	Mining Operations Plan (2015-2020) (Amendment E) (TCPL 2019)	Mine closure not in MOP period.	NT	
2.5	The Plan when lodged will be reviewed by the Department.	Mining Operations Plan (2015-2020) (Amendment E) (TCPL 2019)	Evidence of DRG consultation described in MOP (2015-2020) (TCPL 2019) Section 1.6.2.	C	
2.6	The Director-General may within two (2) months of the lodgement of a Plan, require modification and re-lodgement.	Note	Noted	Note	
2.7	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.	Note	Noted	Note	
2.8	During the life of the Mining Operations Plan, proposed modifications to the Plan must be lodged with the Director-General and will be subject to the review process outlined in clauses (5) - (7) above.	Note	Noted	Note	

TABLE A3 – MINING LEASE 1579
COMPLIANCE WITH MINING LEASE 1579

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
Annual Environmental Management Report (AEMR)					
3.1	Within 12 months of the commencement of mining operations and thereafter annually or, at such other times as may be allowed by the Director-General, the lease holder must lodge an Annual Environmental Management Report (AEMR) with the Director-General.	DPIE 2019 Annual Review Acceptance Letter DPE 2018 Annual Review Acceptance Letter DPE Revised 2017 Annual Review Acceptance Letter Annual Review 2017 Annual Review 2018 Annual Review 2019	Auditor reviewed evidence of reports and letters demonstrating satisfaction of the Minister.	C	
3.2a	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: the accepted Mining Operations Plan;	Annual Review 2019, Table 13 and Section 6.	Section 6 – Environmental Performance and Table 13 of the AEMR provides a review of environmental performance. Proposed improvements are provided under each sub heading within Section 6 of the AEMR.	C	
3.2b	development consent requirements and conditions;	Annual Review 2019, Section 6.	Proposed improvements and review of development consent requirements are provided under each sub heading within Section 6 of the AEMR.	C	

TABLE A3 – MINING LEASE 1579
COMPLIANCE WITH MINING LEASE 1579

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
3.2c	Department of Environment and Conservation and Department of Planning licences and approvals;	Annual Review 2019, Section 6.	Proposed improvements and review of development consent requirements are provided under each sub heading within Section 6 of the AEMR.	C	
3.2d	any other statutory environmental requirements;	Annual Review 2019, Section 6.	Proposed improvements and review of statutory environmental requirements are provided under each sub heading within Section 6 of the AEMR.	C	
3.2e	details of any variations to environmental approvals applicable to the lease area; and	Annual Review 2019, Table 3.	Section 3.1 Table 3 of the AEMR outlines variations to any environmental approvals. The proposed improvements component of Section 6 also outlines the required modifications to environmental approvals applicable to the lease area.	C	
3.2f	where relevant, progress towards final rehabilitation objectives.	Annual Review 2019, Section 8.	Section 8 of the AEMR outlines progress towards final rehabilitation.	C	
3.3	After considering an AEMR the Director-General may, by notice in writing, direct the lease holder to undertake operations, remedial actions or supplementary studies in the manner and within the period specified in the notice to ensure that operations on the lease area are conducted in accordance with sound mining and environmental practice.	Interview: Site Environmental Superintendent	DRG have not requested any changes within the reporting period.	C	

TABLE A3 – MINING LEASE 1579
COMPLIANCE WITH MINING LEASE 1579

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
3.4	The lease holder shall, as and when directed by the Minister, co-operate with the Director-General to conduct and facilitate review of the AEMR involving other government agencies and the local council.	Interview: Site Environmental Superintendent	Site Environmental Superintendent indicated in interview that the AEMR is submitted to relevant government agencies and the local council as required.	C	
Subsidence Management					
4a	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.	Not applicable	No underground mining has commenced on the site so subsidence management is not an issue requiring management.	NT	
4b	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>Applications for Subsidence Management Approvals guidelines (EDG17)</i> .	Not applicable	No underground mining has commenced on the site so subsidence management is not an issue requiring management.	NT	
4c	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 (EDP09)</i> .	Not applicable	No underground mining has commenced on the site so subsidence management is not an issue requiring management.	NT	

TABLE A3 – MINING LEASE 1579
COMPLIANCE WITH MINING LEASE 1579

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
4d	Subsidence Management Plans are to be prepared in accordance with the <i>Guideline for Applications for Subsidence Management Approvals</i> .	Not applicable	No underground mining has commenced on the site so subsidence management is not an issue requiring management.	NT	
4e	Subsidence Management Plans as approved shall form part of the Mining Operations Plan required under Condition 2 and will be subject to the Annual Environmental Management Report process as set out under Condition 3. The SMP is also subject to the requirements for subsidence monitoring and reporting set out in the document <i>New Approval Process for Management of Coal Mining Subsidence - Policy</i> .	Not applicable	No underground mining has commenced on the site so subsidence management is not an issue requiring management.	NT	
Working Requirement					
5a	The lease holder must: Ensure that at least 27 competent people are efficiently employed on the lease area on each week day except Sunday or any week day that is a public holiday, or	Interview: Site Environmental Superintendent Annual Review 2019	Site Environmental Superintendent indicated in interview 150 people work on site on average. AEMR recorded that open cut mining activities generally occur between the hours of 6:30 am and 5:00 pm (day shift) and 4:30 pm and 3:00 am (night shift) from Monday to Friday. Processing of coal day shifts run almost every Saturday, mining activity day shifts have only occurred on occasion to meet production deadlines.	C	

TABLE A3 – MINING LEASE 1579
COMPLIANCE WITH MINING LEASE 1579

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
5b	Expand on operations carried in the course of prospecting or mining the lease area, an amount of not less than \$472,500 per annum whilst the lease is in force.	Annual Group Exploration Report Tarrawonga Open Cut Mine 2017 – 2018 Annual Group Exploration Report Tarrawonga Open Cut Mine 2018 – 2019 Annual Group Exploration Report Tarrawonga Open Cut Mine 2019 – 2020	Auditor reviewed the annual exploration reports for TCM between 2017 and 2020 and identified that the expenditure on operations per annum is well above criteria of \$472,500.	C	
5	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.	Not required	Noted	Note	
Control of Operations					
6a	If an Environmental Superintendent 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: <ul style="list-style-type: none"> (i) cease working the lease; or (ii) cease that part of the operation not complying with the Act or conditions; until in the opinion of the Environmental Superintendent the situation is rectified.	Not required	Noted	Note	

TABLE A3 – MINING LEASE 1579
COMPLIANCE WITH MINING LEASE 1579

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
6b	The lease holder must comply with any direction given. The Director-General may confirm, vary or revoke any such direction.	Section 240 Notice (Resources Regulator DPIE 18 April 2019) Acknowledgement of email (Email from the Resources Regulator 18 May 2020)	TCM received a Section 240 Notice (Resources Regulator DPIE 18 April 2019) directing TCM to (1) prepare and submit a <i>Tarrawonga Coal Mine Rehabilitation Report</i> by 29 November 2019, (2) prepare and submit a draft version on the Report by 23 September 2019, and (3) submit the names and relevant qualifications of the proposed person(s) to be engaged to prepare the Report by 30 May 2019. Evidence that direction 3 was satisfactorily completed is included in the Notice. TCM received an email (Resources Regulator 18 May 2020) acknowledging that the Report was received on 29 November 2019.	C	
6c	A direction referred to in this condition may be served on the Mine Manager.	Noted	Noted	Note	

TABLE A3 – MINING LEASE 1579
COMPLIANCE WITH MINING LEASE 1579

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
Reports					
7a	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: Full particulars, including results, interpretation and conclusions, of all exploration conducted during the twelve months period;	Email from senior mine geologist (24 July 2020)	No exploration drilling has been completed on ML1579 for the reporting period.	NT	
7b	Details of expenditure incurred in conducting that exploration;	Email from senior mine geologist (24 July 2020)	No exploration drilling has been completed on ML1579 for the reporting period.	NT	
7c	A summary of all geological findings acquired through mining or development evaluation activities;	Email from senior mine geologist (24 July 2020)	No exploration drilling has been completed on ML1579 for the reporting period.	NT	
7d	Particulars of exploration proposed to be conducted in the next twelve months period;	Email from senior mine geologist (24 July 2020)	No exploration drilling has been completed on ML1579 for the reporting period.	NT	
7e	All plans, maps, Sections and other data necessary to satisfactorily interpret the report.	Email from senior mine geologist (24 July 2020)	No exploration drilling has been completed on ML1579 for the reporting period.	NT	

TABLE A3 – MINING LEASE 1579
COMPLIANCE WITH MINING LEASE 1579

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
Licence to Use Reports					
8a	The lease holder grants to the Minister, by way of a non-exclusive licence, the right in copyright to publish, print and reproduce all exploration reports lodged in any forms for the full duration of copyright.	Not required	Noted	Note	
8b	The non-exclusive licence will operate as a consent for the purposes of Section 365 of the Mining Act 1992.	Not required	Noted	Note	
Confidentiality					
9a	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: <ul style="list-style-type: none"> (i) the lease holder has agreed that specified reports may be made non-confidential. (ii) reports deal with exploration conducted exclusively on area that have ceased to be part of the lease. 	Not required	Noted	Note	
9b	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.	Not required	Noted	Note	
9c	The Director-General may extend the period of confidentiality.	Not required	Noted	Note	

TABLE A3 – MINING LEASE 1579
COMPLIANCE WITH MINING LEASE 1579

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
Terms of the Non-Exclusive Licence					
10a	The terms of the non-exclusive copyright licence granted under condition 8 (a) are: The Minister may sub-licence other to publish, print, adapt and reproduce but not on-licence reports.	Not required	Noted	Note	
10b	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.	Not required	Noted	Note	
10c	The lease holder does not warrant ownership of all copyright 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.	Not required	Noted	Note	
10d	There is no royalty payable by the Minister for the licence.	Not required	Noted	Note	
10e	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 not less than three months notice.	Not required	Noted	Note	
Blasting					
11a	<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	Environmental Blast Monitoring 2017	Auditor reviewed blast monitoring records. No exceedances of ground vibration of 10mm/s.	C	

TABLE A3 – MINING LEASE 1579
COMPLIANCE WITH MINING LEASE 1579

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	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.	Environmental Blast Monitoring 2018 Environmental Blast Monitoring 2019 Environmental Blast Monitoring 2020			
11b	<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 dwelling or occupied premises, as the case may be, unless determined otherwise by the Department of Environment and Conservation.	Environmental Blast Monitoring 2017 Environmental Blast Monitoring 2018 Environmental Blast Monitoring 2019 Environmental Blast Monitoring 2020	Auditor reviewed blast monitoring records. No exceedances of 120 dB. No exceedances of 115 dB in more than 5% of the total number of blasts at each dwelling.	C	
Safety					
12	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.	Email from senior mine geologist (24 July 2020)	No exploration drilling has been completed on ML1579 for the reporting period.	NT	

TABLE A3 – MINING LEASE 1579
COMPLIANCE WITH MINING LEASE 1579

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
Rehabilitation					
13a	<p>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> <p>there is no adverse environmental effect outside the disturbed area and that the land is properly drained and protected from soil erosion.</p> <p>the state of the land is compatible with the surrounding land and land use requirements.</p> <p>the landforms, soils, hydrology and flora require no greater maintenance than that in the surrounding land.</p> <p>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.</p> <p>The land does not pose a threat to public safety.</p>	<p>Field inspection (rehabilitation areas)</p> <p>Mining Operations Plan (2015-2020) (Amendment E) (TCPL 2019)</p>	<p>The MOP (2015-2020) (Amendment E) (TCPL 2019) includes rehabilitation planning with objectives to ensure public safety and to ensure a safe, stable, non-polluting mine site which has constructed landforms that drain to the natural environment.</p> <p>Field inspection of impact areas identified rehabilitation areas containing drainage control structures.</p> <p>TCM received a Section 240 Notice (Resources Regulator DPIE 18 April 2019) relating to risks of an adverse impact on the environment caused by activities including tube stock planting in multiple areas of the site consistent with the methodology employed in the Southern Emplacement Area of the site, which was a revegetation strategy that was not successful, and inconsistent with the successful and effective revegetation</p>	C	

TABLE A3 – MINING LEASE 1579
COMPLIANCE WITH MINING LEASE 1579

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
			<p>strategy employed in the tail of the dump adjacent to the Tarrawonga/Boggabri lease boundary of the site.</p> <p>TCM was directed to prepare and submit a Tarrawonga Coal Mine Rehabilitation Report by 29 November 2019.</p> <p>TCM received an email (Resources Regulator 18 May 2020) acknowledging that the Report was received on 29 November 2019.</p> <p>Refer to Biodiversity Audit Report.</p>		
13b	Any topsoil that is removed must be stored and maintained in a manner acceptable to the Director-General.	<p>Interview: Site Environmental Superintendent</p> <p>Section 240 Notice (Resources Regulator DPIE 18 April 2019)</p> <p>Acknowledgement of email (Email from the Resources Regulator 18 May 2020)</p>	<p>TCM received a Section 240 Notice (Resources Regulator DPIE 18 April 2019) relating to risks of an adverse impact on the environment caused by activities including management of topsoil at the site.</p> <p>TCM was directed to prepare and submit a <i>Tarrawonga Coal Mine Rehabilitation Report</i> by 29 November 2019.</p> <p>TCM received an email (Resources Regulator 18 May</p>	C	

TABLE A3 – MINING LEASE 1579
COMPLIANCE WITH MINING LEASE 1579

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
			2020) acknowledging that the Report was received on 29 November 2019. Refer to Biodiversity Audit Report.		
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.	Section 240 Notice (Resources Regulator DPIE 18 April 2019) Acknowledgement of email (Email from the Resources Regulator 18 May 2020)	TCM received a Section 240 Notice (Resources Regulator DPIE 18 April 2019) directing TCM to (1) prepare and submit a <i>Tarrawonga Coal Mine Rehabilitation Report</i> by 29 November 2019, (2) prepare and submit a draft version on the Report by 23 September 2019, and (3) submit the names and relevant qualifications of the proposed person(s) to be engaged to prepare the Report by 30 May 2019. Evidence that direction 3 was satisfactorily completed is included in the Notice. TCM received an email (Resources Regulator 18 May 2020) acknowledging that the Report was received on 29 November 2019.	C	

TABLE A3 – MINING LEASE 1579
COMPLIANCE WITH MINING LEASE 1579

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
Exploratory Drilling					
15.1	At least twenty eight days prior to commencement of drilling operations the lease holder must notify the relevant Department of Natural Resources regional hydrogeologist of the intention to drill exploratory drill holes together with information on the location of the proposed holes.	Email from senior mine geologist (24 July 2020)	No exploration drilling has been completed on ML1579 for the reporting period.	NT	
15.2a	If the lease holder drills exploratory drill holes he must satisfy the Director- General that- all cored holes are accurately surveyed and permanently marked in accordance with Departmental guidelines so that their location can be easily established;	Email from senior mine geologist (24 July 2020)	No exploration drilling has been completed on ML1579 for the reporting period.	NT	
15.2b	all holes cored or otherwise are sealed to prevent the collapse of the surrounding surface;	Email from senior mine geologist (24 July 2020)	No exploration drilling has been completed on ML1579 for the reporting period.	NT	
15.2c	all drill holes are permanently sealed with cement plugs to prevent surface discharge of groundwaters;	Email from senior mine geologist (24 July 2020)	No exploration drilling has been completed on ML1579 for the reporting period.	NT	
15.2d	if any drill hole meets natural or noxious gases it is plugged or sealed to prevent their escape;	Email from senior mine geologist (24 July 2020)	No exploration drilling has been completed on ML1579 for the reporting period.	NT	
15.2e	if any drill hole meets an artesian or sub-artesian flow it is effectively sealed to prevent contamination of aquifers.	Email from senior mine geologist (24 July 2020)	No exploration drilling has been completed on ML1579 for the reporting period.	NT	

TABLE A3 – MINING LEASE 1579
COMPLIANCE WITH MINING LEASE 1579

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
15.2f	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.	Email from senior mine geologist (24 July 2020)	No exploration drilling has been completed on ML1579 for the reporting period.	NT	
15.2g	once any drill hole ceases to be used the land and its immediate vicinity is left in a clean, tidy and stable condition.	Email from senior mine geologist (24 July 2020)	No exploration drilling has been completed on ML1579 for the reporting period.	NT	
Prevention of Soil Erosion and Pollution					
16.	Operations must be carried out in a manner that does not cause or aggravate air pollution, water pollution (including sedimentation) or soil contamination or erosion, unless otherwise authorised by a relevant approval, and in accordance with an accepted Mining Operations Plan. For the purpose of this condition, water shall be taken to include any watercourse, waterbody or groundwaters. The lease holder must observe and perform any instructions given by the Director-General in this regard.	Site observation of water cart operation and sediment basins, rehabilitations commenced in locations on-site.	<p>Site inspection by the auditor identified that erosion and sediment control on-site is managed with basins and progressive rehabilitation. Water carts were observed working on site to manage dust. A dust suppressant is also utilised.</p> <p>An exceedance of the EPL limits for oil and grease was recorded for Dam SD14 on 8 February 2020.</p> <p>An uncontrolled discharge from Dam SD2 occurred on 10 February 2020 due to a wall failure after a significant rainfall event. A penalty notice was issued by the EPA.</p>	NC	Duplicate NC. Refer to conditions of approval.

TABLE A3 – MINING LEASE 1579
COMPLIANCE WITH MINING LEASE 1579

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
			<p>Areas of significant erosion were observed above SD14.</p> <p>TCM is currently working with environmental professionals to implement water management improvements including staff training, risk assessments and water pumps.</p> <p>Environmental Superintendent indicated that weather conditions monitored prior to blasts such that the blast is only carried out during conditions to prevent fugitive dust migration.</p>		
Transmission lines, Communication lines and Pipelines					
17.	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.	Not required	Not triggered as none on site.	NT	
Fences, Gates					
18a	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.	Not required	Noted	Note	

TABLE A3 – MINING LEASE 1579
COMPLIANCE WITH MINING LEASE 1579

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
18b	Gates within the lease area must be closed or left open in accordance with the requirements of the landholder.	Not required	Noted	Note	
Roads and Tracks					
19a	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.	Not required	Noted	Note	
19b	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 required	Noted	Note	
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 Natural Resources.	Not required	Noted	Note	

TABLE A3 – MINING LEASE 1579
COMPLIANCE WITH MINING LEASE 1579

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
Trees and Timber					
21a	The lease holder must not fell trees, strip bark or cut timber on the lease without the consent of the landholder who is entitled to the use of the timber, or if such a landholder refuses consent or attaches unreasonable conditions to the consent, without the approval of a warden.	Interview: Site Environmental Superintendent	Whitehaven is the landowner, therefore no other landowner consent is required.	C	
21b	The lease holder must not cut, destroy ringbark or remove any timber or other vegetative cover on the lease area except such as directly obstructs or prevents the carrying on of operations. Any clearing not authorised under the Mining Act 1992 must comply with the provisions of the Native Vegetation Act 2003.	Interview: Site Environmental Superintendent Land Disturbance Protocol 2020	Site Environmental Superintendent indicated in interview that all clearing is undertaken is managed through the Land Disturbance Protocol which includes heritage, flora and fauna, and soil studies.	C	
21c	The lease holder must obtain all necessary approvals or licences before using timber from any Crown land within the lease area.	Interview: Site Environmental Superintendent	No Crown Reserves in ML 1579.	NT	
Resource Recovery					
23a	(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	Interview: Site Environmental Superintendent	No notice has been received during the audit period.	NT	

TABLE A3 – MINING LEASE 1579
COMPLIANCE WITH MINING LEASE 1579

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	environmental are necessary to be recovered, he may give notice in writing to the lease holder requiring the holder to recover such minerals.				
23b	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.	Interview: Site Environmental Superintendent	No notice has been received during the audit period.	NT	
23c	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.	Interview: Site Environmental Superintendent	No notice has been received during the audit period.	NT	
23d	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.	Interview: Site Environmental Superintendent	No notice has been received during the audit period.	NT	
23e	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.	Interview: Site Environmental Superintendent	No notice has been received during the audit period.	NT	
23f	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.	Interview: Site Environmental Superintendent	No notice has been received during the audit period.	NT	

TABLE A3 – MINING LEASE 1579
COMPLIANCE WITH MINING LEASE 1579

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
Indemnity					
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 holder may incur in respect of any accident or injury to any person or property which may arise out of the construction, maintenance or working of any workings now existing or to be made by the lease holder within the lease area or in connection with any of the operations notwithstanding that all other conditions of this lease shall in all respects have been observed by the lease holder or that any such accident or injury shall arise from any act or thing which the lease holder may be licensed or compelled to do.	Not required	Noted	Note	
Security					
25a	A security in the sum of \$100,000 must be given and maintained with the Minister by the lease holder for the purpose of ensuring the fulfilment by the lease holder of 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	Interview: Site Environmental Superintendent	The security letter was verified during the previous audit. The security letter is for the life of ML1579.	C	

TABLE A3 – MINING LEASE 1579
COMPLIANCE WITH MINING LEASE 1579

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	provision hereof or of any provision of the Act or regulations made thereunder.				
25b	<p>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-taking institution.</p>	Not required	Noted	Note	

TABLE A4 – MINING LEASE 1693
COMPLIANCE WITH MINING LEASE 1693

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
Mining Lease Conditions 2010					
Notice to Landholders					
1.	<p>(a) Within a period of three months from the date of grant/renewal of this lease or within such further time as the Minister may allow, the lease holder must serve on each landholder of the land a notice in writing indicating that this lease has been granted/renewed and whether the lease includes the surface. An adequate plan and description of the lease area must accompany the notice.</p> <p>(b) If there are ten or more landholders affected, the lease holder may serve the notice by publication in a newspaper circulating in the region where the lease area is situated. The notice must indicate that this lease has been granted/renewed; state whether the lease includes the surface and must contain an adequate plan and description of the lease area.</p>	Interview with Environmental Superintendent	Not related to this audit as this is outside the audit period.	NT	
Environmental Harm					
2.	<p>(a) The lease holder must implement all practicable measures to prevent and/or minimise any harm to the environment that may result from the construction, operation or rehabilitation of any activities under this lease.</p> <p>(b) For the purposes of this condition:</p> <p>(i) environment means components of the earth, including:</p> <p>(A) land, air and water, and</p> <p>(B) any layer of the atmosphere, and</p>		<i>Refer to CoA</i>		

TABLE A4 – MINING LEASE 1693
COMPLIANCE WITH MINING LEASE 1693

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<p>(C) any organic or inorganic matter and any living organism , and</p> <p>(D) human-made or modified structures and areas, 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>				
Mining Operations Plan					
3a.	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.	Interview with Environmental Superintendent Mining Operations Plan (2015-2020) (Amendment E) (TCPL 2019)	The Director-General satisfaction of performance is gained though the approval of the MOP (2015-2020) (TCPL 2019). Director-General acceptance of performance against the MOP reported in Annual Reviews. Based on the auditor's inspection, mining operations appear to be in accordance with	C	

TABLE A4 – MINING LEASE 1693
COMPLIANCE WITH MINING LEASE 1693

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
			the approved MOP. Refer to CoA		
3b.	<p>The MOP must:</p> <ul style="list-style-type: none"> (i) identify areas that will be disturbed by mining operations; (ii) detail the staging of specific mining operations; (iii) identify how the mine will be managed to allow mine closure; (iv) identify how mining operations will be carried out in order to prevent and or minimise harm to the environment; (v) reflect the conditions of approval under: <ul style="list-style-type: none"> • the <i>Environmental Planning and Assessment Act 1979</i> • the <i>Protection of the Environment Operations 1997</i> • and any other approvals relevant to the development including the conditions of the lease; and • have regard to any relevant guidelines adopted by the Director-General. 	<p>Interview with Environmental Superintendent</p> <p>Mining Operations Plan (2015-2020) (Amendment E) (TCPL 2019)</p>	MOP (2015-2020) (TCPL 2019) details rehabilitation planning (Section 5), implementation (Section 7) and MOP Plans 3(a-f) (annual timeslices) and 4 (post mining land use)	C	
3c.	The leaseholder may apply to the Director-General to amend an approved MOP at any time.	Noted.	Noted	C	
3d.	<p>It is not a breach of this condition if:</p> <ul style="list-style-type: none"> (i) the operations constituting the breach were necessary to comply with a lawful order or direction given under the <i>Mining Act 1992</i>, the 	Noted.	Noted	C	

TABLE A4 – MINING LEASE 1693
COMPLIANCE WITH MINING LEASE 1693

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<p><i>Environmental Planning and Assessment Act 1979, Protection of the Environment Operations Act 1997, Mine Health and Safety Act 2004, Coal Mine Health and Safety Act 2002 and Mine Health and Safety Regulation 2007 Coal Mine Health and Safety Regulation 2006 or the 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>				
3e.	A MOP ceases to have effect 7 years after date of approval or other such period as identified by the Director-General.	Mining Operations Plan (2015-2020) (Amendment E) (TCPL 2019)	The MOP is in effect.	C	
Non-compliance Reporting					
4.	<p>(a) The lease holder must notify the Department upon becoming aware of any breaches of the conditions of this mining lease or breaches of the Mining Act or Regulations;</p> <p>(b) Notifications under condition 4(a) must be provided in the form specified on the Department's website within seven (7) days of the mining lease holder becoming aware of the breach.</p>	Correspondence with regulators Interview with Environmental Superintendent	Non-compliance reports have been field in accordance with this condition during the audit period.	C	

TABLE A4 – MINING LEASE 1693
COMPLIANCE WITH MINING LEASE 1693

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
5. Environmental Incident Report					
	<p>The lease holder must provide environmental incident notifications and reports to the Secretary no later than seven (7) days after those environmental incident notifications and reports are provided to the relevant authorities under the Protection of the Environment Operations Act 1997.</p> <p>Definitions</p> <p>Environmental incident notifications and reports means any notifications and reports required to be provided to relevant authorities under Part 5.7 or Part 5.7A of the <i>Protection of the Environment Operations Act 1997</i>.</p>	<p>Correspondence with regulators</p> <p>Interview with Environmental Superintendent</p>	Incident report have be submitted in accordance with this condition during the audit period.	C	
Additional Environmental Reports					
6.	Additional environmental reports may be required from time to time as directed in writing by the Director-General and must be lodged as instructed.	Not required	Not triggered - S240 gap analysis	Note	
Rehabilitation					
7.	Any disturbance as a result of activities under this lease must be rehabilitated to the satisfaction of the Director-General.	<p>Field inspection (rehabilitation areas)</p> <p>Mining Operations Plan (2015-2020) (Amendment E) (TCPL 2019)</p>	MOP (2015-2020) (TCPL 2019) details rehabilitation planning (section 5) and implementation (section 7).	C	

TABLE A4 – MINING LEASE 1693
COMPLIANCE WITH MINING LEASE 1693

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
Subsidence Management					
8a.	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.	Not applicable	No underground mining has commenced on the site so subsidence management is not an issue requiring management.	NT	
8b.	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>Applications for Subsidence Management Approvals guidelines (EDG17)</i> .	Not applicable	No underground mining has commenced on the site so subsidence management is not an issue requiring management.	NT	
8c.	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 Mine Health & Safety Act 2002</i> , or the document <i>New Subsidence Management Plan Approval Process - Transitional Provisions (EDP09)</i> .	Not applicable	No underground mining has commenced on the site so subsidence management is not an issue requiring management.	NT	
8d.	Subsidence Management Plans are to be prepared in accordance with the <i>Guideline for Applications for Subsidence Management Approvals</i> .	Not applicable	No underground mining has commenced on the site so subsidence management is not an issue requiring management.	NT	
8e.	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	Not applicable	No underground mining has commenced on the site so subsidence management is not an issue requiring management.	NT	

TABLE A4 – MINING LEASE 1693
COMPLIANCE WITH MINING LEASE 1693

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	requirements for subsidence monitoring and reporting set out in the document <i>New Approval Process for Management of Coal Mining Subsidence – Policy</i> .				
Working Requirement					
9a.	<p>The lease holder must:</p> <p>Ensure that at least 17 competent people are efficiently employed in relation to the mining process or mining operations on the lease area.</p>	<p>Interview with Environmental Superintendent Annual Review 2019</p>	<p>Site Environmental Superintendent indicated in interview 150 people work on site on average.</p> <p>AEMR recorded that open cut mining activities generally occur between the hours of 6:30 am and 5:00 pm (day shift) and 4:30 pm and 3:00 am (night shift) from Monday to Friday.</p> <p>Processing of coal day shifts run almost every Saturday, mining activity day shifts have only occurred on occasion to meet production deadlines.</p>	C	
9b.	<p>Expend on operations carried out in the course of prospecting or mining the lease area, an amount of not less than \$297,500 per annum whilst the lease is in force.</p>	<p>Annual Group Exploration Report Tarrawonga Open Cut Mine 2017 – 2018</p> <p>Annual Group Exploration Report Tarrawonga Open Cut Mine 2018 – 2019</p>	<p>Auditor reviewed the annual exploration reports for TCM between 2017 and 2020 and identified that the expenditure on operations per annum is well above criteria of \$297,500.</p>	C	

TABLE A4 – MINING LEASE 1693
COMPLIANCE WITH MINING LEASE 1693

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
		Annual Group Exploration Report Tarrawonga Open Cut Mine 2019 – 2020			
9.	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.	Not required	Noted	note	
Blasting					
10a.	<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.	Environmental Blast Monitoring 2017 Environmental Blast Monitoring 2018 Environmental Blast Monitoring 2019 Environmental Blast Monitoring 2020	Auditor reviewed blast monitoring records. No exceedances of ground vibration of 10mm/s.	C	
10b.	<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	Environmental Blast Monitoring 2017 Environmental Blast Monitoring 2018	Auditor reviewed blast monitoring records. No exceedances of 120 dB. No exceedances of 115 dB in more than 5% of the total number of blasts at each dwelling.	C	

TABLE A4 – MINING LEASE 1693
COMPLIANCE WITH MINING LEASE 1693

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.	Environmental Blast Monitoring 2019 Environmental Blast Monitoring 2020			
Safety					
11.	Operations must be carried out in a manner that ensures the safety of persons or stock in the vicinity of the operations. All drill holes shafts and excavations must be appropriately protected, to the satisfaction of the Director-General, to ensure that access to them by persons and stock is restricted. Abandoned shafts and excavations opened up or used by the lease holder must be notified in writing to the Department and filled in or otherwise rendered safe to a standard acceptable to the Director-General.	Email from senior mine geologist (24 July 2020)	No exploration drilling has been completed on ML1693 for the reporting period.	NT	
Prevention of soil erosion and pollution					
12.	Prospecting operations must be carried out in a manner that does not cause or aggravate air pollution, water (including groundwater) pollution, soil contamination or erosion, unless otherwise authorised by a relevant approval, and in accordance with an accepted Mining Operations Plan.	Site observation of water cart operation and sediment basins, rehabilitations commenced in locations on-site.	Site inspection by the auditor identified that erosion and sediment control on-site is managed with basins and progressive rehabilitation. Water carts were observed working on site to manage dust. A dust suppressant is also utilised.	NC	Duplicate NC. Refer to EPL.

TABLE A4 – MINING LEASE 1693
COMPLIANCE WITH MINING LEASE 1693

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
			<p>An exceedance of the EPL limits for oil and grease was recorded for Dam SD14 on 8 February 2020.</p> <p>An uncontrolled discharge from Dam SD2 occurred on 10 February 2020 due to a wall failure after a significant rainfall event. A penalty notice was issued by the EPA.</p> <p>Areas of significant erosion were observed above SD14.</p> <p>TCM is currently working with environmental professionals to implement water management improvements including staff training, risk assessments and water pumps.</p> <p>Environmental Superintendent indicated that weather conditions monitored prior to blasts such that the blast is only carried out during conditions to prevent fugitive dust migration.</p>		

TABLE A4 – MINING LEASE 1693
COMPLIANCE WITH MINING LEASE 1693

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
Transmission lines, communication lines and Pipelines					
13.	Operations must not interfere with or impair the stability or efficiency of any transmission line, communication line, pipeline or any other utility on the lease area without the prior written approval of the Director-General and subject to any conditions stipulated.	Not required	Not triggered as none on site.	NT	
Roads and Tracks					
14a.	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.	Not required	Noted	Note	
14b.	During wet weather the use of any road or track must be restricted so as to prevent damage to the road or track.	Noted	Noted	Note	
14c.	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	Noted	Noted	Note	
14d.	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.	Noted	Noted	Note	

TABLE A4 – MINING LEASE 1693
COMPLIANCE WITH MINING LEASE 1693

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
Trees and Vegetation					
15a.	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.	Interview with Environmental Superintendent	Whitehaven is the landowner; therefore, no other landowner consent is required.	C	
15b.	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.	Interview with Environmental Superintendent	No Crown Reserves in ML 1693.	NT	
Resource Recovery					
17a.	Notwithstanding any description of mining methods and their sequence or of proposed resource recovery contained within the Mining Operations Plan, if at any time the Director-General is of the opinion that minerals which the lease entitles the lease holder to mine and which are economically recoverable at the time are not being recovered from the lease area, or that any such minerals which are being recovered are not being recovered to the extent which should be economically possible or which for environmental reasons are necessary to be recovered, notice in writing to the lease holder may be given requiring the holder to recover such minerals.	Interview with Environmental Superintendent	No notice has been received during the audit period.	NT	

TABLE A4 – MINING LEASE 1693
COMPLIANCE WITH MINING LEASE 1693

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
17b.	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.	Interview with Environmental Superintendent	No notice has been received during the audit period.	NT	
17c.	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.	Interview with Environmental Superintendent	No notice has been received during the audit period.	NT	
Indemnity					
18.	The lease holder must indemnify and keep indemnified the Crown from and against all actions, suits, claims and demands of whatsoever nature and all costs, charges and expenses which may be brought against the lease holder or which the lease holder may incur in respect of any accident or injury to any person or property which may arise out of the construction , maintenance or working of any workings now existing or to be made by the lease holder within the lease area or in connection with any of the operations notwithstanding that all other conditions of this lease shall in all respects have been observed by the lease holder or that any such accident or injury shall arise from any act or thing which the lease holder may be licensed or compelled to do.	Not required	Noted	Noted	

TABLE A4 – MINING LEASE 1693
COMPLIANCE WITH MINING LEASE 1693

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
Single Security (extended)					
21.	The single security given and maintained with the Minister by the lease holder for the purpose of ensuring the fulfilment by the lease holder of obligations under Mining Lease 1579 is extended to apply to this lease.	Interview with Environmental Superintendent	The security letter was verified during the previous audit. The security letter is for the life of ML1693.	C	
Suspension of Mining Operations					
23.	The holder of a mining lease may not suspend mining operations in the mining area other than in accordance with the consent of the Minister.	Not required	Not triggered	NT	
Cooperation Agreement					
24.	<p>The lease holder must make every reasonable attempt, and be able to demonstrate their attempts, to enter into a cooperation agreement with the holder(s) of any overlapping title(s). The cooperation agreement should address but not be limited to issues such as:</p> <ul style="list-style-type: none"> • access arrangements • operational interaction procedures • dispute resolution • information exchange • well location • timing of drilling • potential resource extraction conflicts and • rehabilitation issues. 	Not required	Not triggered as there are no overlapping titles.	NT	

TABLE A4 – MINING LEASE 1693
COMPLIANCE WITH MINING LEASE 1693

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
Exploration Reporting					
	<p>Note: <u>Exploration Reports (Geological and Geophysical)</u></p> <p>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.</p> <p>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).</p>	<p>Annual Group Exploration Report Tarrawonga Open Cut Mine 2017 – 2018</p> <p>Annual Group Exploration Report Tarrawonga Open Cut Mine 2018 – 2019</p> <p>Annual Group Exploration Report Tarrawonga Open Cut Mine 2019 – 2020</p>	<p>Auditor reviewed the annual exploration reports for TCM between 2017 and 2020 and these were lodged to the satisfaction of the Minister.</p>	C	

TABLE A5 – MINING LEASE 1685
COMPLIANCE WITH MINING LEASE 1685

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
Mining Lease Conditions 2004					
Notice to Landholders					
1.	<p>(a) Within a period of three months from the date of grant/renewal of this mining lease, the lease holder must serve on each landholder a notice in writing indicating that this mining lease has been granted/renewed and whether the lease includes the surface. A plan identifying each landholder and individual land parcel subject to the lease area, and a description of the lease area must accompany the notice.</p> <p>(b) If there are ten or more landholders, the lease holder may serve the notice by publication in a newspaper circulating in the region where the lease area is situated. The notice must indicate that this mining lease has been granted/renewed; state whether the lease includes the surface and must contain a plan and description of the lease area. If a notice is made under condition 1(b), compliance with condition 1(a) is not required.</p>	Interview with Environmental Superintendent	Verified in pervious audit period	NT	
Rehabilitation					
2.	Any disturbance resulting from the activities carried out under this mining lease must be rehabilitated to the satisfaction of the Minister.	Field inspection (rehabilitation areas) Mining Operations Plan (2015-2020) (Amendment E) (TCPL 2019)	MOP (2015-2020) (TCPL 2019) details rehabilitation planning (section 5) and implementation (section 7).	C	

TABLE A5 – MINING LEASE 1685
COMPLIANCE WITH MINING LEASE 1685

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
Mining Operations Plan and Annual Rehabilitation Report					
3a.	The lease holder must comply with an approved Mining Operations Plan (MOP) in carrying out any significant surface disturbing activities, including mining operations, mining purposes and prospecting. The lease holder must apply to the Minister for approval of a MOP. An approved MOP must be in place prior to commencing any significant surface disturbing activities, including mining operations, mining purposes and prospecting.	Interview with Environmental Superintendent Mining Operations Plan (2015-2020) (Amendment E) (TCPL 2019)	The Director-General satisfaction of performance is gained through the approval of the MOP (2015-2020) (TCPL 2019). Director-General acceptance of performance against the MOP reported in Annual Reviews. Based on the auditor's inspection, mining operations appear to be in accordance with the approved MOP. Refer to CoA.	C	
3b.	The MOP must identify the post mining land use and set out a detailed rehabilitation strategy which: <ul style="list-style-type: none"> i. identifies areas that will be disturbed; ii. details the staging of specific mining operations, mining purposes and prospecting; iii. identifies how the mine will be managed and rehabilitated to achieve the postmining land use; iv. identifies how mining operations, mining purposes and prospecting will be carried out in order to prevent and or minimise harm to the environment; and v. reflects the conditions of approval under: <ul style="list-style-type: none"> • the <i>Environmental Planning and Assessment Act 1979</i>; 	Interview with Environmental Superintendent Mining Operations Plan (2015-2020) (Amendment E) (TCPL 2019)	MOP (2015-2020) (TCPL 2019) details rehabilitation planning (Section 5), implementation (Section 7) and MOP Plans 3(a-f) (annual timeslices) and 4 (post mining land use)	C	

TABLE A5 – MINING LEASE 1685
COMPLIANCE WITH MINING LEASE 1685

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<ul style="list-style-type: none"> the <i>Protection of the Environment Operations Act 1997</i>; and any other approvals relevant to the development including the conditions of this mining lease. 				
3c.	The MOP must be prepared in accordance with the ESG3: Mining Operations Plan (MOP) Guidelines September 2013 published on the Department's website at www.resources.nsw.gov.au/environment .	Interview: Site Environmental Superintendent Mining Operations Plan (2015-2020) (Amendment E) (TCPL 2019)	Mining Operations Plan (2015-2020) (Amendment E) (TCPL 2019) Section 1 states that the document was prepared in accordance with the Mining Operations Plan (MOP) Guidelines (DTIRIS 2013).	C	
3d.	The lease holder may apply to the Minister to amend an approved MOP at any time.	Noted.	Noted.	C	
3e.	<p>It is not a breach of this condition if:</p> <ul style="list-style-type: none"> i. the operations which, but for this condition 3(e) would be a breach of condition 3(a), were necessary to comply with a lawful order or direction given under the Environmental Planning and Assessment Act 1979, the Protection of the Environment Operations Act 1997, the Mine Health and Safety Act 2004 I Coal Mine Health and Safety Act 2002 and Mine Health and Safety Regulation 2007 I Coal Mine Health and Safety Regulation 2006 or the Work Health and Safety Act 2011; and ii. the Minister had been notified in writing of the terms of the order or direction prior to the operations constituting the breach being carried out. 	Noted.	Noted.	C	

TABLE A5 – MINING LEASE 1685
COMPLIANCE WITH MINING LEASE 1685

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
3f.	<p>The lease holder must prepare a Rehabilitation Report to the satisfaction of the Minister. The report must:</p> <ul style="list-style-type: none"> i. provide a detailed review of the progress of rehabilitation against the performance measures and criteria established in the approved MOP; ii. be submitted annually on the grant anniversary date (or at such other times as agreed by the Minister); and iii. be prepared in accordance with any relevant annual reporting guidelines published on the Department's website at www.resources.nsw.gov.au/environment. <p><i>Note: The Rehabilitation Report replaces the Annual Environmental Management Report.</i></p>	Interview: Site Environmental Superintendent Mining Operations Plan (2015-2020) (Amendment E) (TCPL 2019)	<p>TCM was directed to prepare and submit a Tarrawonga Coal Mine Rehabilitation Report by 29 November 2019.</p> <p>TCM received an email (Resources Regulator 18 May 2020) acknowledging that the Report was received on 29 November 2019.</p>	C	
Non-Compliance Reporting					
4.	<p>(a) The lease holder must notify the Department upon becoming aware of any breaches of the conditions of this mining lease or breaches of the Mining Act or Regulations;</p> <p>(b) Notifications under condition 4(a) must be provided in the form specified on the Department's website within seven (7) days of the mining lease holder becoming aware of the breach.</p>	Correspondence with regulators Interview with Environmental Superintendent	Notifications have been made in accordance with this report during the audit period.	C	
Environmental Incident Report					
5.	The lease holder must provide environmental incident notifications and reports to the Secretary no later than seven (7) days after those environmental incident notifications and	Correspondence with regulators.	Incident reports have been filed in accordance with this	C	

TABLE A5 – MINING LEASE 1685
COMPLIANCE WITH MINING LEASE 1685

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<p>reports are provided to the relevant authorities under the <i>Protection of the Environment Operations Act 1997</i>.</p> <p>Definitions</p> <p>Environmental incident notifications and reports means any notifications and reports required to be provided to relevant authorities under Part 5.7 or Part 5.7A of the <i>Protection of the Environment Operations Act 1997</i>.</p>	Interview with Environmental Superintendent	condition during the audit period.		
Subsidence Management					
6.	<p>The lease holder must not commence or undertake underground mining operations that may cause subsidence of the surface other than in accordance with an Eligible Subsidence Management Plan approved by the Director-General.</p> <p>For the purposes of this condition, an 'Eligible Subsidence Management Plan' means:</p> <ul style="list-style-type: none"> (i) A Subsidence Management Plan prepared in accordance with current government guidelines for the preparation of Subsidence Management Plans; or (ii) Those parts of an Extraction Plan or another type of plan: <ul style="list-style-type: none"> • prepared, either in whole or in part, with reference to current government guidelines for the preparation of a Subsidence Management Plan; and • approved for the purposes of the Environmental Planning and Assessment Act 1979 (or any planning legislation which 	Not applicable	No underground mining has commenced on the site so subsidence management is not an issue requiring management.	NT	

TABLE A5 – MINING LEASE 1685
COMPLIANCE WITH MINING LEASE 1685

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	replaces that Act) by the Minister or Director-General of the Department of Planning & Infrastructure, or another officer of that Department authorised to approve such a plan, which relate to issues of subsidence.				
Resource Recovery					
7.	The lease holder must optimise recovery of the minerals that are the subject of this mining lease to the extent economically feasible.	Note	Noted	Note	
Single Security					
8.	<p>The lease holder is required to provide and maintain a security deposit to secure funding for the fulfilment of obligations of all or any kind under the mining lease, including obligations of all or any kind under the mining lease that may arise in the future.</p> <p>The amount of the security deposit to be provided as a single security has been assessed by the Minister at \$4,364,000.</p> <p>The leases covered by the single security include: Mining Lease 1579 (Act 1992)</p>	Interview with Environmental Superintendent	The security letter was verified during the previous audit. The security letter is for the life of ML1685.	C	
Cooperation Agreement					
9.	The lease holder must make every reasonable attempt, and be able to demonstrate its attempts, to enter into a cooperation agreement with the holder(s) of any overlapping title(s). The cooperation agreement should address but not be limited to issues such as:	Not required	Not triggered as there are no known overlapping titles.	NT	

TABLE A5 – MINING LEASE 1685
COMPLIANCE WITH MINING LEASE 1685

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<ul style="list-style-type: none"> • access arrangements • operational interaction procedures • dispute resolution • information exchange • well location • timing of drilling • potential resource extraction conflicts; and • rehabilitation issues. 				
Special Conditions					
10.	The lease holder must submit a security review (in accordance with ESU guidelines and policy) within one month of the granting of the new mining lease.	Not required	Not triggered Compensation agreement with NSW Forestry – monetary compensation based on amount of land cleared and administrative work invoiced annually.	NT	

TABLE A5 – MINING LEASE 1685
COMPLIANCE WITH MINING LEASE 1685

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
Exploration Reporting					
	<p><i>Note: <u>Exploration Reports (Geological and Geophysical)</u></i> <i>The lease holder must lodge reports to the satisfaction of the Minister in accordance with section 163C of the Mining Act 1992 and in accordance with clause 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>	<p>Annual Group Exploration Report Tarrawonga Open Cut Mine 2017 – 2018</p> <p>Annual Group Exploration Report Tarrawonga Open Cut Mine 2018 – 2019</p> <p>Annual Group Exploration Report Tarrawonga Open Cut Mine 2019 – 2020</p>	<p>Auditor reviewed the annual exploration reports for TCM between 2017 and 2020 and these were lodged to the satisfaction of the Minister.</p>	C	

TABLE A6 – MINING LEASE 1749
COMPLIANCE WITH MINING LEASE 1749

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
Mining Lease Conditions 2013					
Notice to Landholders					
1.	<p>(a) Within a period of three months from the date of grant/renewal of this mining lease, the lease holder must serve on each landholder a notice in writing indicating that this mining lease has been granted/renewed and whether the lease includes the surface. A plan identifying each landholder and individual land parcel subject to the lease area, and a description of the lease area must accompany the notice.</p> <p>(b) If there are ten or more landholders, the lease holder may serve the notice by publication in a newspaper circulating in the region where the lease area is situated. The notice must indicate that this mining lease has been granted/renewed; state whether the lease includes the surface and must contain a plan and description of the lease area. If a notice is made under condition 1(b), compliance with condition 1(a) is not required.</p>	Interview with Environmental Superintendent	Transferred on 4 September 2017 from Boggabri coal. No landholders on the lease.	NT	
Rehabilitation					
2.	Any disturbance resulting from the activities carried out under this mining lease must be rehabilitated to the satisfaction of the Minister.	Field inspection (rehabilitation areas) Mining Operations Plan (2015-2020) (Amendment E) (TCPL 2019)	MOP (2015-2020) (TCPL 2019) details rehabilitation planning (section 5) and implementation (section 7).	C	

TABLE A6 – MINING LEASE 1749
COMPLIANCE WITH MINING LEASE 1749

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
Mining Operations Plan and Annual Rehabilitation Report					
3a.	The lease holder must comply with an approved Mining Operations Plan (MOP) in carrying out any significant surface disturbing activities, including mining operations, mining purposes and prospecting. The lease holder must apply to the Minister for approval of a MOP. An approved MOP must be in place prior to commencing any significant surface disturbing activities, including mining operations, mining purposes and prospecting.	Interview with Environmental Superintendent Mining Operations Plan (2015-2020) (Amendment E) (TCPL 2019)	The Director-General satisfaction of performance is gained through the approval of the MOP (2015-2020) (TCPL 2019). Director-General acceptance of performance against the MOP reported in Annual Reviews. Based on the auditor's inspection, mining operations appear to be in accordance with the approved MOP. Refer to CoA	C	
3b.	The MOP must identify the post mining land use and set out a detailed rehabilitation strategy which: (i) identifies areas that will be disturbed; (ii) details the staging of specific mining operations, mining purposes and prospecting; (iii) identifies how the mine will be managed and rehabilitated to achieve the post mining land use; (iv) identifies how mining operations, mining purposes and prospecting will be carried out in order to prevent and or minimise harm to the environment; and (v) reflects the conditions of approval under: <ul style="list-style-type: none">the <i>Environmental Planning and Assessment Act 1979</i>;	Interview with Environmental Superintendent Mining Operations Plan (2015-2020) (Amendment E) (TCPL 2019)	MOP (2015-2020) (TCPL 2019) details rehabilitation planning (Section 5), implementation (Section 7) and MOP Plans 3(a-f) (annual timeslices) and 4 (post mining land use)	C	

TABLE A6 – MINING LEASE 1749
COMPLIANCE WITH MINING LEASE 1749

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<ul style="list-style-type: none"> the <i>Protection of the Environment Operations Act 1997</i>; and any other approvals relevant to the development including the conditions of this mining lease. 				
3c.	The MOP must be prepared in accordance with the <i>ESG3: Mining Operations Plan (MOP) Guidelines September 2013</i> published on the Department's website at www.resourcesandenergy.nsw.gov.au/miners-and-explorers/rules-and-forms/pgf/environmental-guidelines	<p>Interview: Site Environmental Superintendent</p> <p>Mining Operations Plan (2015-2020) (Amendment E) (TCPL 2019)</p>	Mining Operations Plan (2015-2020) (Amendment E) (TCPL 2019) Section 1 states that the document was prepared in accordance with the Mining Operations Plan (MOP) Guidelines (DTIRIS 2013).	C	
3d.	The lease holder may apply to the Minister to amend an approved MOP at any time.	Noted.	Noted.	Note	
3e.	<p>It is not a breach of this condition if:</p> <p>(i) the operations which, but for this condition 3(e) would be a breach of condition 3(a), were necessary to comply with a lawful order or direction given under the <i>Environmental Planning and Assessment Act 1979</i>, the <i>Protection of the Environment Operations Act 1997</i>, the <i>Work Health and Safety (Mines and Petroleum Sites) Act 2013</i> and <i>Work Health and Safety (Mines and Petroleum Sites) Regulation 2014</i> or the <i>Work Health and Safety Act 2011</i>; and <i>Work Health and Safety Regulation 2011</i>;</p> <p>(i) the Minister had been notified in writing of the terms of the order or direction prior to the operations constituting the breach being carried out.</p>	Noted.	Noted.	Note	

TABLE A6 – MINING LEASE 1749
COMPLIANCE WITH MINING LEASE 1749

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
3f.	<p>The lease holder must prepare a Rehabilitation Report to the satisfaction of the Minister. The report must:</p> <ul style="list-style-type: none"> (ii) provide a detailed review of the progress of rehabilitation against the performance measures and criteria established in the approved MOP; (iii) be submitted annually on the grant anniversary date (or at such other times as agreed by the Minister); and (iv) be prepared in accordance with any relevant annual reporting guidelines published on the Department's website at www.resourcesandenergy.nsw.gov.au/miners-and-explorers/rules-and-forms/pgf/environmental-guidelines <p><i>Note: The Rehabilitation Report replaces the Annual Environmental Management Report.</i></p>	Interview with Environmental Superintendent Mining Operations Plan (2015-2020) (Amendment E) (TCPL 2019)	<p>TCM was directed to prepare and submit a Tarrawonga Coal Mine Rehabilitation Report by 29 November 2019.</p> <p>TCM received an email (Resources Regulator 18 May 2020) acknowledging that the Report was received on 29 November 2019.</p>	C	
Non-compliance reporting					
4.	<ul style="list-style-type: none"> (a) The lease holder must notify the Department upon becoming aware of any breaches of the conditions of this mining lease or breaches of the Mining Act or Regulations; (b) Notifications under condition 4(a) must be provided in the form specified on the Department's website within seven (7) days of the mining lease holder becoming aware of the breach. 	Correspondence with regulators Interview with Environmental Superintendent	Non-compliance reports have been filed in accordance with this condition during the audit period.	C	
Environmental Incident Report					
5.	The lease holder must provide environmental incident notifications and reports to the Secretary no later than seven (7) days after those environmental incident notifications and reports are provided to the relevant authorities under the <i>Protection of the Environment Operations Act 1997</i> .	Correspondence with regulators Interview with Environmental Superintendent	Incident reports have been filed during the audit period.	C	

TABLE A6 – MINING LEASE 1749
COMPLIANCE WITH MINING LEASE 1749

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
Extraction Plan					
6.	<p>(a) In this condition:</p> <p>(i) approved Extraction Plan means a plan, being:</p> <p>A. an extraction plan or subsidence management plan approved in accordance with the conditions of a relevant development consent and provided to the Secretary; or</p> <p>B. a subsidence management plan relating to the mining operations subject to this lease:</p> <p>I. submitted to the Secretary on or before 31 December 2014; and</p> <p>II. approved by the Secretary.</p> <p>(ii) relevant development consent means a development consent or project approval issued under the Environmental Planning & Assessment Act 1979 relating to the mining operations subject to this lease.</p> <p>(b) The lease holder must not undertake any underground mining operations that may cause subsidence except in accordance with an approved Extraction Plan.</p> <p>(c) The lease holder must ensure that the approved Extraction Plan provides for the effective management of risks associated with any subsidence resulting from mining operations carried out under this lease.</p> <p>(d) The lease holder must notify the Secretary within 48 hours of any:</p> <p>(i) incident caused by subsidence which has a potential to expose any person to health and safety risks;</p> <p>(ii) significant deviation from the predicted nature, magnitude,</p>	Not applicable	No underground mining has commenced on the site so subsidence management is not an issue requiring management.	NT	

TABLE A6 – MINING LEASE 1749
COMPLIANCE WITH MINING LEASE 1749

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<p>distribution, timing and duration of subsidence effects, and of the potential impacts and consequences of those deviations on built features and the health and safety of any person; or</p> <p>(iii) significant failure or malfunction of a monitoring device or risk control measures set out in the approved Extraction Plan addressing:</p> <p>A. built features;</p> <p>B. public safety; or</p> <p>C. subsidence monitoring.</p>				
Resource Recovery					
7.	The lease holder must optimise recovery of the minerals that are the subject of this mining lease to the extent economically feasible.	Interview with Environmental Superintendent Mining Operations Plan (2015-2020) (Amendment E) (TCPL 2019)	As per MOP	C	
Group Security					
8.	<p>The lease holder is required to provide and maintain a security deposit to secure funding for the fulfilment of obligations of all or any kind under the mining lease, including obligations of all or any kind under the mining lease that may arise in the future.</p> <p>The amount of the security deposit to be provided as a group security has been assessed by the Minister at \$21,150,000.</p> <p>The leases covered by the group security include:</p>	Interview with Environmental Superintendent	The security letter was verified during the previous audit. The security letter is for the life of ML1749.	C	

TABLE A6 – MINING LEASE 1749
COMPLIANCE WITH MINING LEASE 1749

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	Mining Lease 1579, Mining Lease 1685 and Mining Lease 1693 (Act 1992) This group security is extended to apply to this lease.				
Cooperation Agreement					
9.	The lease holder must make every reasonable attempt, and be able to demonstrate its attempts, to enter into a cooperation agreement with the holder(s) of any overlapping title(s). The cooperation agreement should address but not be limited to issues such as: <ul style="list-style-type: none"> • access arrangements • operational interaction procedures • dispute resolution • information exchange • well location • timing of drilling • potential resource extraction conflicts; and • rehabilitation issues. 	Not required	There are no overlapping titles.	NT	
Exploration Reporting					
	<i>Note: <u>Exploration Reports (Geological and Geophysical)</u></i> <i>The lease holder must lodge reports to the satisfaction of the Minister in accordance with section 163C of the Mining Act 1992 and in accordance with clause 59 of the Mining Regulation 2016.</i> <i>Reports must be prepared in accordance with Exploration Reporting: A guide for reporting on exploration and prospecting in New South Wales.</i>	Annual Group Exploration Report Tarrawonga Open Cut Mine 2017 – 2018 Annual Group Exploration Report	Auditor reviewed the annual exploration reports for TCM between 2017 and 2020 and these were lodged to the satisfaction of the Minister.	NT	

TABLE A6 – MINING LEASE 1749
COMPLIANCE WITH MINING LEASE 1749

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<p>SPECIAL CONDITIONS</p> <p>Note: The standard conditions apply to all mining leases. The Division of Resources & Geoscience (DRG) reserves the right to impose special conditions, based on individual circumstances, where appropriate.</p>	<p>Tarrawonga Open Cut Mine 2018 – 2019</p> <p>Annual Group Exploration Report Tarrawonga Open Cut Mine 2019 – 2020</p>			

APPENDIX B DEPARTMENTAL CORRESPONDENCE

Mr Tony Dwyer
Group Manager - Approvals and Environment
Whitehaven Coal Limited
PO Box 56
BOGGABRI NSW 2382

Via Email Only: tdwyer@whitehavencoal.com.au

27/07/2020

Dear Mr Dwyer

**Agreement of Independent Auditor
Tarrawonga Mine (PA 11_0047)**

I refer to Whitehaven Coal Limited's (WCL) submission, dated 2 June 2020, seeking the agreement of the Secretary of the Department of Planning, Industry and Environment (the Department) of a suitably qualified, experienced and independent audit team to undertake the 2020 independent environmental audit (IEA) of Tarrawonga Mine and further submission dated 10 July 2020 seeking a replacement support auditor.

Reference is also made to correspondence received on 24 July 2020 from WCL seeking an administrative amendment to the original endorsement letter dated 5 June 2020 and endorsement of a replacement support auditor dated 13 July 2020 to include endorsement under an additional condition of consent.

As such, in accordance with Schedule 5, Condition 10 and Schedule 3, Condition 50 of PA 11_0047 (the Approval) and the *Post-approval requirements for State significant developments* (Department, October 2015), the Secretary has agreed to the following audit team:

- Heather McKay – Lead Auditor;
- Brigitte Healey – Support Auditor;
- Oliver Moore – Technical Review;
- Wijnand (Vey) Gemson – Hydrogeologist;
- Sebastien Madden – Ecologist;
- Aaron McKenzie – Noise and Vibration;
- Robert Smith – Back-up Lead Auditor.

Please ensure this letter, and all previous correspondence regarding the 2020 IEA, is appended to the IEA Report.

The IEA must be prepared, undertaken and finalised in accordance with the *Post-approval requirements for State significant developments* (Department, October 2015). Failure to meet these requirements will require revision and resubmission.

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

Yours sincerely,



Heidi Watters
Team Leader Northern
Compliance
As nominee of the Secretary

Mr Tony Dwyer
Group Manager - Approvals and Environment
Whitehaven Coal Limited
PO Box 56
BOGGABRI NSW 2382

Via Email Only: tdwyer@whitehavencoal.com.au

05/06/2020

Dear Mr Dwyer

**Agreement of Independent Auditor
Tarrawonga Mine (PA 11_0047)**

I refer to Whitehaven Coal Limited's (WCL) submission, dated 2 June 2020, seeking the agreement of the Secretary of the Department of Planning, Industry and Environment (the Department) of a suitably qualified, experienced and independent audit team to undertake the 2020 independent environmental audit (IEA) of Tarrawonga Mine.

In accordance with Schedule 5, Condition 10 of PA 11_0047 (the Approval) and the *Post-approval requirements for State significant developments* (Department, October 2015), the Secretary has agreed to the following audit team:

- Heather McKay – Lead Auditor;
- Dean Kerr – Support Auditor;
- Oliver Moore – Technical Review;
- Wijnand (Vey) Gemson – Hydrogeologist;
- Sebastien Madden – Ecologist;
- Aaron McKenzie – Noise and Vibration;
- Robert Smith – Back-up Lead Auditor.

Please ensure this correspondence is appended to the IEA Report.

The IEA must be prepared, undertaken and finalised in accordance with the *Post-approval requirements for State significant developments* (Department, October 2015). Failure to meet these requirements will require revision and resubmission.

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

Yours sincerely,



Heidi Watters
Team Leader Northern
Compliance

As nominee of the Secretary

Mr Tony Dwyer
Group Manager - Approvals and Environment
Whitehaven Coal Limited
PO Box 56
BOGGABRI NSW 2382

Via Email Only: tdwyer@whitehavencoal.com.au

13/07/2020

Dear Mr Dwyer

**Agreement of Independent Auditor
Tarrawonga Mine (PA 11_0047)**

I refer to Whitehaven Coal Limited's (WCL) submission, dated 10 July 2020, seeking the agreement of the Secretary of the Department of Planning, Industry and Environment (the Department) of a replacement Support Auditor to undertake the 2020 independent environmental audit (IEA) of Tarrawonga Mine.

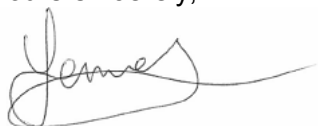
In accordance with Schedule 5, Condition 10 of PA 11_0047 (the Approval) and the *Post-approval requirements for State significant developments* (Department, October 2015), the Secretary has agreed to the following replacement Support Auditor:

- Brigitte Healey.

Please ensure this correspondence is appended to the IEA Report.

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

Yours sincerely,



James Epstein
Acting Team Leader Northern
Compliance, Planning & Assessment
As nominee of the Secretary

From: [James Hutchinson-Smith](#)
To: [Heather McKay](#); admin.northwest@lls.nse.gov.au
Cc: [Lynden Cini \(LCini@whitehavencoal.com.au\)](mailto:LCini@whitehavencoal.com.au); [Sebastien Moreno](#); [Oliver Moore](#); [Sebastian Madden](#)
Subject: Re: Whitehaven Coal Tarrawonga Mine - Independent Environmental Audit and Independent Biodiversity Audit
Date: Friday, 24 July 2020 12:22:43 PM
Attachments: [image003.jpg](#)

Heather,

The Team and I will review what you have provided and try and get back to you before the deadline.

Regards

James.

James Hutchinson-Smith | General Manager
North West Local Land Services
Tamworth Agriculture Institute | 4 Marsden Park Road
PO Box 500 | Calala NSW 2340
T: 02 6764 5970 | M: 0428 485 985
E: James.hutchinson-Smith@lls.nsw.gov.au
W: www.northwest.lls.nsw.gov.au

From: Heather McKay <Heather.McKay@erm.com>
Sent: Friday, 24 July 2020 12:13
To: James Hutchinson-Smith <james.hutchinson-smith@lls.nsw.gov.au>;
admin.northwest@lls.nse.gov.au <admin.northwest@lls.nse.gov.au>
Cc: Lynden Cini (LCini@whitehavencoal.com.au) <LCini@whitehavencoal.com.au>; Sebastien Moreno <smoreno@whitehavencoal.com.au>; Oliver Moore <Oliver.Moore@erm.com>;
Sebastian Madden <Sebastian.Madden@erm.com>
Subject: Whitehaven Coal Tarrawonga Mine - Independent Environmental Audit and Independent Biodiversity Audit

Dear James,

I am currently completing the Independent Environmental Audit (IEA) and Biodiversity Audit on the Conditions of Approval issued to Tarrawonga Coal Mine, PA 11_0047.

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. It would be appreciated if there are any concerns, areas of focus etc., they are raised by 3 August 2020.

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

Kind regards,

Heather

Heather McKay
Senior Environmental and Social Governance Consultant

ERM

Level 4, 201 Leichhardt St | Spring Hill | QLD 4000
PO Box 1400 | Spring Hill | QLD 4004
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E Heather.McKay@erm.com | W www.erm.com

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From: [Renee Shepherd](#)
To: [Heather McKay](#)
Cc: [Samantha Wynn](#); [Liz Mazzer](#)
Subject: RE: Whitehaven Coal Tarrawonga Mine - Independent Environmental Audit and Independent Biodiversity Audit
Date: Monday, 3 August 2020 6:06:03 PM
Attachments: [image005.jpg](#)
[image006.jpg](#)

Hi Heather,

Thank you for providing us with the opportunity to contribute to the Independent Environmental Audit and Biodiversity Audit for the Tarrawonga Coal Mine.

Given that Aboriginal cultural heritage responsibilities have transferred to Heritage NSW, BCD's main area of interest centres around biodiversity. As such, the items we request to be considered in the audit are:

1. Assess the adequacy and effectiveness of the implementation of the Biodiversity Management Plan (Schedule 3 Condition 47), in particular regarding:
 - a. delivery of the proposed management and monitoring actions, and performance and completion criteria
 - b. whether any of the trigger points in the TARP have been exceeded and whether the corresponding response was adequate
2. Determine whether an updated version of the BMP has been finalised as per Schedule 3 Condition 48 following completion of Stage 2 of the Leard Forest Regional Biodiversity Strategy (the Strategy was approved on 1 September 2017 and the version of the BMP on the website is 9 April 2015).
3. Determine whether an updated version of the Biodiversity Offset Strategy has been prepared as per Schedule 3 Condition 42 following completion of Stage 2 of the Leard Forest Regional Biodiversity Strategy (version on the website is 28 August 2013).
4. Update on IEA recommendations from the 2017 audit (Table 3.2 in the 2017 IEA) and whether findings and recommendations have been implemented by the proponent, including:
 - a. 3.40 – additional detail provided in the annual reviews as requested
 - b. 3.49 – confirm the conservation and biodiversity bond has been lodged
 - c. 3.64(h) – confirm that the MOP has been revised to describe implementation, monitoring and auditing of rehabilitation
 - d. 1.2.33 – confirm that the annual monitoring schedule has been developed, and there is evidence of regular monitoring of ecological rehabilitation risks

Regards,

Renee.

Renee Shepherd

Senior Project Officer – Special Projects, North West

Biodiversity and Conservation Division | Department of Planning, Industry and Environment

T 02 6883 5355 | **M** 0488 444 953 | **E** renee.shepherd@environment.nsw.gov.au

48-52 Wingewarra Street, Dubbo NSW 2830

www.dpie.nsw.gov.au



Our Vision: Together, we create thriving environments, communities and economies.

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

Sent: Friday, 24 July 2020 12:13 PM

To: Renee Shepherd <Renee.Shepherd@environment.nsw.gov.au>

Cc: Lynden Cini (LCini@whitehavencoal.com.au) <LCini@whitehavencoal.com.au>; Sebastien Moreno <smoreno@whitehavencoal.com.au>; Oliver Moore <Oliver.Moore@erm.com>; Sebastian Madden <Sebastian.Madden@erm.com>

Subject: Whitehaven Coal Tarrawonga Mine - Independent Environmental Audit and Independent Biodiversity Audit

Dear Renee,

I am currently completing the Independent Environmental Audit (IEA) and Biodiversity Audit on the Conditions of Approval issued to Tarrawonga Coal Mine, PA 11_0047.

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. It would be appreciated if there are any concerns, areas of focus etc., they are raised by 3 August 2020.

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

Kind regards,
Heather

Heather McKay
Senior Environmental and Social Governance Consultant

ERM

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E Heather.McKay@erm.com | W www.erm.com

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Any views expressed in this email are those of the individual sender except where the sender expressly and with authority states them to be the views of the NSW Office of Environment and Heritage.

PLEASE CONSIDER THE ENVIRONMENT BEFORE PRINTING THIS EMAIL

From: [Mark Buchan](#)
To: [Heather McKay](#)
Subject: RE: Whitehaven Coal Tarrawonga Mine - Independent Environmental Audit
Date: Monday, 27 July 2020 5:08:49 PM
Attachments: [image003.png](#)
[image004.png](#)
[image005.png](#)
[image006.jpg](#)
[image007.jpg](#)

Hi Heather,

Thank you for the email and the opportunity to provide any concerns with the site.

The Tarrawong Coal Mine has had various Government Agencies including the Resources Regulator involved in undertaking regulatory actions against the title on Conditions of Approval. I suggest you seek a copy of these regulatory actions to assist you with your environmental audit.

Regards

Mark Buchan

Senior Inspector Environment

NSW Resources Regulator | Department of Regional NSW

T 02 6360 9526 | **M** 0427 327 718 | **E** mark.buchan@planning.nsw.gov.au

161 Kite Street (Locked Bag 21) Orange NSW 2800

www.resourcesregulator.nsw.gov.au



The Department of Regional New South Wales acknowledges that it stands on Country which always was and always will be Aboriginal land. We acknowledge the Traditional Custodians of the land and waters, and we show our respect for Elders past, present and emerging. We are committed to providing places in which Aboriginal people are included socially, culturally and economically through thoughtful and collaborative approaches to our work..

Please Note: All applications made under the *Mining Act 1992*, and any related correspondence or inquiries must be submitted via email to nswresourcesregulator@service-now.com. If you require any assistance lodging applications or have a general inquiry please call 1300 814 609 (Option 2 then 5).



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

Sent: Monday, 27 July 2020 4:25 PM

To: Mark Buchan <mark.buchan@planning.nsw.gov.au>

Subject: FW: Whitehaven Coal Tarrawonga Mine - Independent Environmental Audit

Dear Mark,

I would like to provide a reminder for the below request. I would appreciate if you could provide any items for input into the IEA by Thursday 30 July.

Kind regards,
Heather

From: Heather McKay

Sent: Friday, July 10, 2020 6:01 PM

To: mark.buchan@planning.nsw.gov.au; nswresourcesregulator@service-now.au

Cc: Lynden Cini (LCini@whitehavencoal.com.au) <LCini@whitehavencoal.com.au>; Sebastien Moreno <SMoreno@whitehavencoal.com.au>; Oliver Moore <Oliver.Moore@erm.com>

Subject: Whitehaven Coal Tarrawonga Mine - Independent Environmental Audit

Dear Mark,

I am currently completing the Independent Environmental Audit (IEA) on the Conditions of Approval issued to Tarrawonga Coal Mine, PA 11_0047.

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 29-30 July 2020, therefore it would be appreciated if there are any concerns, areas of focus etc., they are raised by 24 July 2020.

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

Kind regards,
Heather

Heather McKay
Senior Environmental and Social Governance Consultant

ERM

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PO Box 1400 | Spring Hill | QLD 4004

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E Heather.McKay@erm.com | **W** www.erm.com

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Leanne Jeffrey

From: David Ross - VUCA Strategist <david.ross@phoenixstrategic.com.au>
Sent: Thursday, 23 July 2020 2:57 PM
To: Heather McKay
Subject: Re: Whitehaven Coal Tarrawonga Mine - Independent Environmental Audit

Hi Heather

as requested, I've approached the CCC members to gain their input into the IEA.

Many on the CCC have been very happy with the mine's social and environmental efforts and consequently, did not provide any input. However, there was one request for the Audit to review bushfire management, on site. There have been concerns in the area with respect to the need to revegetate (offsets, for example) and the risk this is perceived to create for bushfires.

Otherwise, obviously the management of water is a significant concern within the region as well.

regards
David

Chair, Tarrawonga CCC

On Tue, Jul 14, 2020 at 11:11 AM Heather McKay <Heather.McKay@erm.com> wrote:

Hi David,

If you are able to collate their input that would be appreciated.

Many thanks.

Regards,

Heather

From: David Ross - VUCA Strategist <david.ross@phoenixstrategic.com.au>
Sent: Monday, July 13, 2020 5:07 PM
To: Heather McKay <Heather.McKay@erm.com>
Subject: Re: Whitehaven Coal Tarrawonga Mine - Independent Environmental Audit

Thanks Heather.

Would you like to forward your email to the members of the community consultative committee for them to provide input? Or would you prefer for me to collate their input?

Warm regards

David

Chair, Tarrawonga CCC

On Fri, 10 Jul 2020, 6:01 pm Heather McKay, <Heather.McKay@erm.com> wrote:

| Dear David,

I am currently completing the Independent Environmental Audit (IEA) on the Conditions of Approval issued to Tarrawonga Coal Mine, PA 11_0047.

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 29-30 July 2020, therefore it would be appreciated if there are any concerns, areas of focus etc., they are raised by 24 July 2020.

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

Kind regards,

Heather

Heather McKay

Senior Environmental and Social Governance Consultant

ERM

Level 4, 201 Leichhardt St | Spring Hill | QLD 4000

PO Box 1400 | Spring Hill | QLD 4004

T +61 (0)7 3007 8486 M +61 (0)420 532 113

E Heather.McKay@erm.com | W www.erm.com

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Leanne Jeffrey

From: James Epstein <James.Epstein@planning.nsw.gov.au>
Sent: Monday, 13 July 2020 9:26 AM
To: Heather McKay
Cc: Lynden Cini (LCini@whitehavencoal.com.au); Sebastien Moreno; Oliver Moore; Heidi Watters
Subject: RE: Whitehaven Coal Tarrawonga Mine - Independent Environmental Audit

Good morning Heather,

Thank you for the opportunity to provide input into the 2020 Tarrawonga Independent Environmental Audit.

The Department requests that ERM pay particular attention during the audit to compliance with the following:

- Site water management and implementation of the water management plan; and
- Implementation of the air quality and greenhouse gas management plan.

If you'd like to discuss further I can be contacted on the details provided below.

Regards

James Epstein
A/ Team Leader Compliance

Planning & Assessment | Department of Planning, Industry and Environment
T 02 6575 3419 | **M** 0429 395 691 | **E** james.epstein@planning.nsw.gov.au
PO Box 3145, Singleton NSW 2330

If you are submitting a compliance document or request as required under the conditions of consent or approval, please note that the Department is no longer accepting lodgement via compliance@planning.nsw.gov.au.

The Department has recently upgraded the Major Projects Website to improve the timeliness and transparency of its post approval and compliance functions. As part of this upgrade, proponents are now requested to submit all post approval and compliance documents online, via the Major Projects Website. To do this, please refer to the instructions available [here](#).

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.



Please consider the environment before printing this e-mail.

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

Sent: Friday, 10 July 2020 6:01 PM

To: James Epstein <James.Epstein@planning.nsw.gov.au>

Cc: Lynden Cini (LCini@whitehavencoal.com.au) <LCini@whitehavencoal.com.au>; Sebastien Moreno <SMoreno@whitehavencoal.com.au>; Oliver Moore <Oliver.Moore@erm.com>

Subject: Whitehaven Coal Tarrawonga Mine - Independent Environmental Audit

Dear James,

I am currently completing the Independent Environmental Audit (IEA) on the Conditions of Approval issued to Tarrawonga Coal Mine, PA 11_0047.

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 29-30 July 2020, therefore it would be appreciated if there are any concerns, areas of focus etc., they are raised by 24 July 2020.

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

Kind regards,
Heather

Heather McKay
Senior Environmental and Social Governance Consultant

ERM

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E Heather.McKay@erm.com | W www.erm.com



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Leanne Jeffrey

From: McIlveen - Tracy <Tracymcilveen@infogunnedah.com.au>
Sent: Tuesday, 14 July 2020 11:03 AM
To: Heather McKay
Cc: Lynden Cini (LCini@whitehavencoal.com.au); Sebastien Moreno; Oliver Moore
Subject: RE: Whitehaven Coal Tarrawonga Mine - Independent Environmental Audit

Dear Ms McKay

1515343 - Tarrawonga Coal Mine - Independent Environmental Audit - Terms of Reference

Council wishes to acknowledge the receipt of your email regarding the above matter.

Your request has been forwarded to Mr Andrew Johns, Director Planning and Environmental Services, as requested.

If you wish to make an enquiry regarding the status of your request, please do not hesitate to contact Council on 02 6740 2100.

You can assist enquiries by quoting the reference number above.

Yours faithfully

Tracy



Tracy McIlveen Executive Assistant to the General Manager and Director Planning and Environmental Services

Gunnedah Shire Council, PO Box 63 (63 Elgin Street), GUNNEDAH NSW 2380, AUSTRALIA

T +61 2 6740 2100 (ext 115) **E** tracymcilveen@infogunnedah.com.au

www.gunnedah.nsw.gov.au or www.facebook.com/gunnedahshire

All correspondence to be emailed to council@infogunnedah.com.au

I acknowledge the Kamilaroi Aboriginal Nation as the traditional custodians of the land on which I live, work and play. I pay my respect to Elders past and present.

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If you have received this email in error, please notify us immediately by email or by the telephone number listed above.

From: Heather McKay [mailto:Heather.McKay@erm.com]
Sent: Friday, 10 July 2020 6:01 PM
To: Council Email
Cc: Lynden Cini (LCini@whitehavencoal.com.au); Sebastien Moreno; Oliver Moore
Subject: Whitehaven Coal Tarrawonga Mine - Independent Environmental Audit

For the attention of Andrew Jones

Dear Andrew,

I am currently completing the Independent Environmental Audit (IEA) on the Conditions of Approval issued to Tarrawonga Coal Mine, PA 11_0047.

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 29-30 July 2020, therefore it would be appreciated if there are any concerns, areas of focus etc., they are raised by 24 July 2020.

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

Kind regards,
Heather

Heather McKay
Senior Environmental and Social Governance Consultant

ERM
Level 4, 201 Leichhardt St | Spring Hill | QLD 4000
PO Box 1400 | Spring Hill | QLD 4004
T +61 (0)7 3007 8486 **M** +61 (0)420 532 113
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Leanne Jeffrey

From: Mark Buchan <mark.buchan@planning.nsw.gov.au>
Sent: Monday, 27 July 2020 5:09 PM
To: Heather McKay
Subject: RE: Whitehaven Coal Tarrawonga Mine - Independent Environmental Audit

Hi Heather,

Thank you for the email and the opportunity to provide any concerns with the site.

The Tarrawong Coal Mine has had various Government Agencies including the Resources Regulator involved in undertaking regulatory actions against the title on Conditions of Approval. I suggest you seek a copy of these regulatory actions to assist you with your environmental audit.

Regards

Mark Buchan
Senior Inspector Environment

NSW Resources Regulator | Department of Regional NSW

T 02 6360 9526 | M 0427 327 718 | E mark.buchan@planning.nsw.gov.au

161 Kite Street (Locked Bag 21) Orange NSW 2800

www.resourcesregulator.nsw.gov.au



The Department of Regional New South Wales acknowledges that it stands on Country which always was and always will be Aboriginal land. We acknowledge the Traditional Custodians of the land and waters, and we show our respect for Elders past, present and emerging. We are committed to providing places in which Aboriginal people are included socially, culturally and economically through thoughtful and collaborative approaches to our work..

Please Note: All applications made under the *Mining Act 1992*, and any related correspondence or inquiries must be submitted via email to nswresourcesregulator@service-now.com. If you require any assistance lodging applications or have a general inquiry please call 1300 814 609 (Option 2 then 5).



From: Heather McKay <Heather.McKay@erm.com>
Sent: Monday, 27 July 2020 4:25 PM
To: Mark Buchan <mark.buchan@planning.nsw.gov.au>
Subject: FW: Whitehaven Coal Tarrawonga Mine - Independent Environmental Audit

Dear Mark,
I would like to provide a reminder for the below request. I would appreciate if you could provide any items for input into the IEA by Thursday 30 July.

Kind regards,
Heather

From: Heather McKay
Sent: Friday, July 10, 2020 6:01 PM
To: mark.buchan@planning.nsw.gov.au; nswresourcesregulator@service-now.com
Cc: Lynden Cini (LCini@whitehavencoal.com.au) <LCini@whitehavencoal.com.au>; Sebastien Moreno <SMoreno@whitehavencoal.com.au>; Oliver Moore <Oliver.Moore@erm.com>
Subject: Whitehaven Coal Tarrawonga Mine - Independent Environmental Audit

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