

BARNETT & MAY

Mt Thorley Warkworth Mine (SSD 6464 / SSD 6465)

2023 Independent Environmental
Audit

Prepared for

**Warkworth Mining Limited / Mt Thorley
Operations Pty Limited**

Client representative

Gary Mulhearn

Date

4 August 2023

Revision 0



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Prepared by — K. Holmes		Date – 4 August 2023
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Revision History					
Rev No.	Description	Prepared by	Reviewed by	Authorised by	Date
a	Draft for client Review	/ R Peterson	K. Holmes	K. Holmes	23 July 2023
0	Final Report	K. Holmes	R Peterson	K Holmes	4 August 2023

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1. Introduction

Mount Thorley Warkworth (MTW) is an integrated operation of two open cut mines located adjacent to each other, 15 kilometres south-west of Singleton in the Hunter Valley region of New South Wales. Both the Mount Thorley and Warkworth mines have been in operation since 1981. The mines operate under separate State Significant Development (SSD) planning approvals as follows:

- Warkworth Continuation Project – SSD 6464 (Applicant: Warkworth Mining Limited (WML))
- Mt Thorley Continuation Project – SSD 6465 (Applicant: Mount Thorley Operations Pty Ltd (MTO))

The purpose of the audit, that was undertaken in accordance with the **Barnett and May's** proposal (dated 29 January 2023), was to determine if the compliance obligations contained in the Project Approvals (the Independent Audit Conditions form both approvals are identical) under Schedule 5, Conditions 9 and 10, which states:

C9 - "Within 1 year of the commencement of development of the site, and every three years thereafter, unless the Planning Secretary directs otherwise, the Applicant must commission and pay the full cost of an Independent Environmental Audit of the Development. This audit must:

(a) be conducted by suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Planning Secretary;

(b) include consultation with the relevant agencies;

(c) assess the environmental performance of the project and assess whether it is complying with the relevant requirements in this approval and any relevant EPL or mining lease (including any assessment, plan or program required under these approvals);

d) include an assessment – undertaken by an independent expert whose appointment has been endorsed by BCD – of the progress towards implementation of the biodiversity offset strategy, in particular the regeneration of Warkworth Sands Woodland against the detailed performance and completion criteria under the biodiversity management plan (see condition 36 of schedule 3);

(e) review the adequacy of strategies, plans or programs required under the abovementioned approval or licences; and

(f) recommend measures or actions to improve the environmental performance of the Development, and/or any strategy, plan or Program required un these consents.

Note: This audit team must be led by a suitably qualified auditor and include experts in any fields specified by the Secretary.

C10 – Within six weeks of completion of the audit, or as otherwise agreed by the Secretary, the Applicant must submit a copy of the audit report to the Secretary, together with its response to any recommendations contained in the Audit Report.

The Audit was commissioned on 8 April 2023. The site inspection was undertaken by Ken Holmes (Accredited Lead Auditor), Richard Peterson (Auditor) of Barnett & May along with Ecology experts from Cumberland Ecology from 26 April to 27 April 2023. The nominated surface water expert undertook a desktop review of compliance relation to the surface water management plans and monitoring undertaken by the mine.

MTW requested an extension of time for finalisation of the Audit which was granted by DPE on 13 July 2023. The approved submission date was extended to 4 August 2023. A copy of the DPE correspondence is provided in Appendix C.

1.1 Mt Thorley / Warkworth Mine Complex.

1.1.1 Warkworth Mine

The Warkworth Mine is an open cut mine located approximately 8 km southwest of Singleton in the Hunter Valley. It has been continuously operating since 1981. The area surrounding the mine is dominated by coal mines and associated infrastructure, other mining-related industry and agriculture. Hunter Valley Operations, the now disused Redbank Power Station and Wambo Mine are to the north and north-west, respectively. Mount Thorley and the Bulga Coal Complex are located to the south. Mount Thorley Industrial Estate (MTIE) is to the east.

The nearest settlement is the Bulga village, which is located approximately 5 km to the west. The majority of residents are located off The Inlet Road. The residences at the western limit of The Inlet Road are slightly elevated and have direct views of the Bulga and Mt Mount Thorley mine overburden emplacement areas. There are also several rural-residential properties in proximity to Warkworth Mine.

1.1.2 Mount Thorley Mine

The Mount Thorley Mine is an open cut coal mine. At the time of the audit no significant mining was in progress and the works being undertaken focused on filling (with overburden) the main pit, stabilisation and rehabilitation works. The Auditor understands that as part of the shaping of final landforms, some further coal may be extracted, however those works are likely to be limited in scope.

1.2 Audit Objectives

The objectives of this Independent Environmental Audit were to:

1. Assess compliance against the conditions of the Project Approvals.
2. Review all relevant post approval documentation required by the Project Approval(s) including an assessment of the implementation of Environmental Management Plans and Sub-plans.
3. Review compliance against other relevant environmental licences and approvals
4. Review the environmental performance of the development including:
 - a. A high-level comparison of actual impacts against predicted impacts as documented in the environmental impact assessment.
 - b. The physical extent of the development in comparison with the approved project boundaries.
 - c. Review of environmental incidents, non-compliances, and complaints relevant to the audit period.
 - d. Performance against any applicable environmental policy or environmental issue identified through consultation with the relevant Regulatory Authorities.
 - e. Feedback received from DPE, other Agencies or Stakeholders including the Community Consultative Committee (or equivalent body) relating to environmental performance of the development.
5. Review of the status of non-compliances and recommendations made in the preceding Independent Environmental Audit.
6. A high-level assessment of the adequacy of the Environmental Management Plans and Sub-plans required by the Approval.
7. Review performance of the development against any other matters considered relevant by the auditor or the Department, considering relevant regulatory requirements and legislation, knowledge of the development's past performance and comparison to industry best practices.

1.3 Audit Scope

The audit was undertaken as per the brief outlined in the Barnett and May proposal (dated 29 January 2023) and provides an assessment of the compliance of the project with the conditions of the following approvals:

- Project Approval SSD 6464 (Warkworth)
- Project Approval SSD 6465 (Mt Thorley)
- Environment Protection Licence EPL 1376 (Warkworth)
- Environment Protection Licence EPL 1976 (Mt Thorley)
- Mining Leases - CCL753, CL219, ML1412, ML1590, ML1751, ML1752. Note that the Mining Act 1992 was amended in 2021 by the Mining Amendment (Standard Conditions of Mining Leases – Rehabilitation) Regulation 2021. That amendment replaced the mine specific mining lease conditions with a set of standard conditions. This IEA will therefore audit compliance against the Standard Conditions as presented in the 2021 Regulation and a high-level review of compliance against the now superseded conditions of the individual mining leases.

The scope of the audit excluded the Environment Protection Licence for the Mount Thorley Coal Loader (EPL 24) or the Commonwealth (EPBC Approvals) EPBC – 2009/5081 and EPBC- 2002/629.

The scope of this audit was developed to meet the requirements of the New South Wales Department of Planning, and Environment (DPE) Independent Audit Post Approval Guidelines May 2020 and was developed with consideration of:

- Requirements of the Project Approval(s)
- Relevant correspondence from DPE and other government agencies including the Environment Protection Authority (EPA); (provided by the Auditee);
- Inputs provided by government and community Stakeholders consulted with as part of this IEA;
- Review of the findings of the previous IEA; and
- The Auditor's experience in relation to relevant industry practices.

1.4 Audit Period

The audit covered the period from 1 May 2020 to 25 April 2023 (the Audit Period).

2. Definitions

Acronyms	Description
ACHMP	Aboriginal Cultural Heritage Management Plan
AER	Annual Environmental Review
AR	Annual Review
AQGMP	Air Quality and Greenhouse Gas Management Plan
BCT	Biodiversity Conservation Trust
BMP	Blast Management Plan
BioMP	Biodiversity Management Plan
BOS	Biodiversity Off-set Strategy
CC	Construction Certificate
CCC	Community Consultative Committee
DPE	Department of Planning and Environment (formerly the Department of Planning, Industry and Environment)
DPIE	Department of Planning, Industry and Environment (now DPE as noted above)
EMS	Environmental Management System
EMSt	Environmental Management Strategy
EPA	NSW Environment Protection Authority
EP&A Act	NSW Environmental Planning and Assessment Act
EPBC	Environmental Protection and Biodiversity Conservation Act (Commonwealth)
EPL	Environment Protection License
GMP	Groundwater Management Plan
FHA	Final Hazard Analysis
HMMP	Hazardous Materials Management Plan
IEA	Independent Environmental Audit
LMP	Landscape Management Plan
MOP	Mining Operations Plan
MTW	Mt Thorley Warkworth (Mining Complex)
NOW	NSW Office of Water

Acronyms	Description
NMP	Noise Management Plan
NRAR	Natural Resource Regulator
OC	Occupation Certificate
OEH	NSW Office of Environment and Heritage
OEMP	Operational Environmental Management Plan
PA	Project Approval
PIRMP	Pollution Incident Response Management Plan
NRAR	Natural Resource Regulator
REF	Review of Environmental Factors
RMP	Rehabilitation Management Plan
RR	(Natural) Resource Regulator
SSC	Singleton Shire Council
SWB	Site Water Balance
SWMP	Surface Water Management Plan
TMP	Traffic Management Plan
TSF	Tailing Storage Facility
WMP	Water Management Plan
WRE	Waste Rock Emplacement
WSWIMP	Warkworth Sands Woodlands Integrated Management Plan
WRMP	Waste Rock Management Plan

3. Auditor Certification

Independent Audit Certification Form	
Development Name	Mt Thorley Warkworth
Development Consent Numbers	SSD 6464 and SSD 6465
Description of Development	Open Cut Coal Mining
Development Address	Mt Thorley, New South Wales
Proponent	Warkworth Mining Ltd and Mount Thorley Operations Pty Ltd
Operator Address	PO Box 267, Singleton NSW 2330
Title of Audit	Mt Thorley Warkworth 2023 Independent Environmental Audit
<p><i>I certify that I have undertaken the independent audit and prepared the contents of the attached independent audit report and to the best of my knowledge:</i></p> <ul style="list-style-type: none"> <i>The audit has been undertaken in accordance with relevant approval condition(s) and in general accordance with the auditing standard AS/NZS ISO 19011:2011 and in general conformance with the DPE’s Independent Audit Post Approval Requirements (June 2018).</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><i>Note.</i></p> <p><i>a) The Independent Audit is an ‘environmental audit’ for the purposes of section 122B (2) of the Environmental Planning and Assessment Act 1979. Section 122E provides that a person must not include false or misleading information (or provide information for inclusion in) an audit report produced to the Minister in connection with an environmental audit if the person knows that the information is false or misleading in a material respect. The maximum penalty is, in the case of a corporation, \$1 million and for an individual, \$250,000.</i></p> <p><i>b) The Crimes Act 1900 contains other offences relating to false and misleading information: section 192G (Intention to defraud by false or misleading statement—maximum penalty 5 years imprisonment); sections 307A, 307B and 307C (False or misleading applications/information/documents—maximum penalty 2 years imprisonment or \$22,000, or both).</i></p>	
Signature	
Name of Lead/Principal Auditor	Ken Holmes
Address	49 Coba Point, Berowra Waters, NSW
Email Address	ken@baeckea.com.au
Auditor Certification (if relevant)	Exemplar Global 14065
Date	4 August 2023

3.1 Auditee Details

Audit Title:	MTW Project 2022 Independent Environmental Audit
Site:	Mt Thorley Warkworth, Mt Thorley, New South Wales
Client Contact:	Gary Mulhearn
Position:	Environment & Community Manager
Client:	Warkworth Mining Limited, as agent for the participants in the Mount Thorley & Warkworth Joint Venture
Client Address:	PO Box 267, Singleton NSW 2330
Client Phone Number	0403 963 081
Client Email:	gary.mulhearn@yancoal.com.au
Audit Team Leader:	Ken Holmes – Certified Lead Auditor
Auditor's Telephone:	0438 046 261
Auditor's Email:	ken@baeckea.com.au
Date of Site Visit	26 - 27 April 2023

4. Audit process

4.1 Audit Guidelines

This audit report has also been prepared in accordance with the 'Independent Audit Guideline, May 2020 (Audit Guidelines) (DPE, 2020). Table 1 lists key requirements from the Audit Guidelines, the relevant Section of the Guidelines which references the requirement and indicates where each is addressed in this report.

Table 1 - Post Approval Audit Guidelines

Section	Independent Audit Report Requirements	Addressed
4.1	<p>Version Control</p> <ol style="list-style-type: none"> 1) the application number of the project; 2) each version or revision number of the report; 3) the date on which the report was prepared and issued to the Department; and 4) the title and name of the person who certified the Independent Audit Report. 	<p>Section 3</p> <p>Page iii</p> <p>Page iii</p> <p>Section 3.1</p>
4.2	<p>Contents</p>	
4.2.1	<p>Introduction – a brief overview of the audit including:</p> <ol style="list-style-type: none"> 1) background of the project; 2) the audit team (including qualifications and experience); 3) the objectives of the audit; 4) the audit scope; and 5) the temporal period covered by the audit. 	<p>Section 1.1</p> <p>Section 4.3.1 and Appendix E</p> <p>Section 1.2</p> <p>Section 1.3</p> <p>Section 1.4</p>
4.2.2	<p>Audit Methodology</p> <ol style="list-style-type: none"> 1) documentation from the Planning Secretary agreeing to the auditor and any technical specialist(s); 2) how the audit scope was developed; 3) a summary of the audit process adopted to determine the compliance status and assess if documents are adequate; 4) site personnel interviewed including their name and position title (and including if access was not granted or possible with any required personnel and why); 5) details of site inspections undertaken (including any areas where access was not granted or possible and why); 6) a summary of the consultation undertaken; and 7) meanings of compliance status descriptors used, as set out in this document. 	<p>Appendix C</p> <p>Section 1.3</p> <p>Section 4</p> <p>Section 4.5.3</p> <p>Section 4.5.2</p> <p>Section 5</p> <p>Section 4.6</p>
4.2.3	<p>Audit Findings</p> <ol style="list-style-type: none"> 1) a list of the approvals and documents audited; 2) a summary of the assessment of compliance i.e. comparison between the total number of compliance requirements and any non-compliances identified during the reporting period. Graphics can be used to summarise project performance in relation to compliance requirements; 3) a summary of any notices, orders, penalty notices or prosecutions issued in relation to the consent during the audit period; 	<p>Appendix A</p> <p>Section 6.1</p> <p>Section 7.3</p>

Section	Independent Audit Report Requirements	Addressed
	4) exception reporting of all non-compliances identified during the audit period. Details must include the relevant consent condition, the condition reference number, a unique non-compliance identification number, details of the non-compliance and the auditor's recommended actions that are proposed to be taken or have been taken to address the non-compliance;	Section 6.2
	5) a brief discussion or table of the status of actions arising from previous audits and the progress or outcomes of each action. Details must include the source of the action, reference (condition number), action proposed, proposed completion date, the status (date completed, if relevant) and the action complete.	Section 7.6
	6) a brief discussion of whether the Environmental Management Plans, Sub-plans and compliance documents are adequate, implemented and whether there are any opportunities for improvement;	Section 7.5
	7) a discussion of other matters considered relevant by the auditor or the Department taking into account relevant regulatory requirements and legislation and knowledge of the development's past performance;	Section 7.9
	8) documentation of any feedback received as a result of consultation undertaken with the Department, and other agencies or stakeholders including the community and Community Consultative Committee for the audit and the outcomes of this consultation;	Section 5
	9) a summary of complaints, and the adequacy of the response to, and management of complaints;	Section 7.2
	10) details of any incidents (including any enforcement action by any agency) and the adequacy of the response to, and management of such incidents;	Section 7.1
	11) an assessment of the compliance between actual and predicted impacts documented in environmental impact assessment, including an assessment of the physical extent of the development in comparison with the approved boundary and any potential off-site impacts of the development required under the Environmental Planning and Assessment Act 1979;	Section 7.8
	12) evidence collected through site inspections undertaken during the audit;	Appendix A
	13) evidence to support compliance assessment provided by the personnel interviewed during the audit;	Appendix A
	14) a brief discussion of any continual environmental management improvement opportunities identified as part of the audit; and	Section 6.2
	15) key strengths of the development's environmental management and performance identified by the auditor.	Section 7.4
4.2.4	Recommendations and opportunities for Improvement	Section 6.2
4.2.5	Appendices 1) a completed Independent Compliance Register with all relevant conditions of consent, identifying each requirement, compliance	Appendix A

Section	Independent Audit Report Requirements	Addressed
	status assessed, documenting verified evidence and providing recommendations for any non-compliance that is identified;	
	2) a copy of documentation from the Planning Secretary agreeing to the auditor and any technical specialist(s);	Appendix C
	3) documentation detailing consultation with the Department, and other agencies or stakeholders including the community and Community Consultative Committee;	Appendix D
	4) completed and signed Independent Audit Declaration Form(s);	Section 3
	5) any reports prepared by the agreed technical specialist(s), as required; and	Specialist inputs have been integrated into this report.
	6) site inspection photographs.	Appendix B

4.2 Overview

The audit process and methodology are summarised in this section, and comprised the following key undertakings:

- Preliminary planning activities
- Review of information and preparation of a compliance register (audit protocol / checklist)
- Site inspection and interviews:
 - Opening meeting
 - Site inspection
 - Review of relevant records
- Review of additional information provided after the site inspection
- Preparation of this audit report.

4.3 Preliminary activities

Off-site planning for the site audit comprised:

- Initial discussions with client representative, to organise the site inspection and access to audit documentation
- Prepare the audit compliance checklist
- Completion of a project specific Risk Assessment
- Review of online information
- Submission of a preliminary document / record request
- Consultation with relevant agencies.

4.3.1 Approval of audit teams

MTW sought the Secretary's endorsement for the audit team to undertake this Independent Environmental Audit.

The Secretary approved the following team on 29 March 2023 (Appendix C):

- Ken Holmes – Certified Lead Auditor
- Richard Peterson – Auditor
- Dr Gitanjali Katrak – Ecology / rehabilitation Specialist; and
- Adam Bishop – Surface Water Management

4.3.2 Consultation with Agencies

The Auditor consulted with the following agencies during the audit planning stage:

- Department of Planning and Environment (DPE);
- NSW Environment Protection Authority (EPA);
- Heritage NSW
- Biodiversity Conservation Trust (BCT)
- Natural Resource Regulator (NRAR)
- Singleton Shire Council (SSC) and
- Community Consultative Committee (CCC).

Emails were initially sent to each of the above agencies / groups advising them of timing and scope of the audit with an invitation for them to provide comments/requirements or specific environmental issues they required the audit to target. Where required (where no response was provided by the nominated stakeholder organisation) a follow up email was sent to repeat the invitation to provide input into the audit.

4.4 Information Review and Compliance Register

Prior to the site inspection the Auditor prepared a detailed audit checklist (spreadsheet) that was used to assess and track compliance. This spreadsheet formed the basis of the compliance register presented in the Appendices of this report.

4.5 Site audit

The site inspection component of the audit was undertaken over two days from 26 to 27 April 2023.

4.5.1 Opening Meeting

Following site inductions, the opening meeting was held on-site. It was attended by the following personnel:

MTW / Yancoal Attendees:

- David Bennett – General Manager
- Gary Mulhearn – Environment & Community Manager
- John Najor – Mining Manager
- Brendan Behringer – Manager Projects
- Chris Collier – Technical Services Manager
- Iain Hornshaw – Yancoal Superintendent, Environmental Compliance & Approvals
- Lloyd Jeston – CHPP Process Superintendent
- Brett Porter – Maintenance Superintendent - Infrastructure
- Bill Baxter – Environmental Specialist – Rehabilitation
- Douglas Fenton – Environment & Community Advisor
- Joshua van Bezouwen – Environment & Community Advisor
- Rebert Carter – Environment & Community Advisor
- Alex Smith – Environment & Community Advisor

Audit Team

- Ken Holmes (Lead Auditor) – Barnett and May.
- Richard Peterson (Auditor) – Barnett and May
- Dr Gitanjali Katrak – Cumberland Ecology
- Calum Fleming – Cumberland Ecology

Introductions were made, and the purpose and scope of the audit was outlined. An explanation of the audit process was communicated. That is, a site inspection, site interviews and detailed review of records in order to identify compliance with the approval conditions relevant to the current operations at the site.

4.5.2 Site Inspections

A initial tour of the site was undertaken by the Audit Team. Subsequent detailed inspections of specific areas of the operation were subsequently undertaken. The Auditor was provided with access to all areas of the site, except for mine pit operational areas, for safety reasons. The site inspection included observation of:

- Site Access and Security
- Open cut pits
- Mine infrastructure
- Processing Plant
- Rehabilitation and off-set areas
- Waste storage areas;
- Fuel and dangerous goods storage areas;
- Plant and equipment maintenance area;
- Tailings Storage
- Surface water management infrastructure

4.5.3 Site Interviews

Audit interviews comprised of a series of meetings with:

- Gary Mulhearn – Environment & Community Manager
- Iain Hornshaw – Yancoal Superintendent, Environmental Compliance & Approvals
- Lloyd Jeston – CHPP Process Superintendent
- Brett Porter – Maintenance Superintendent - Infrastructure
- Bill Baxter – Environmental Specialist – Rehabilitation
- Douglas Fenton – Environment & Community Advisor
- Joshua van Bezouwen – Environment & Community Advisor
- Rebert Carter – Environment & Community Advisor
- Alex Smith – Environment & Community Advisor

4.5.4 Document review

Compliance related documents that were not available prior to, and during site discussions of, the audit, were requested to be provided following the audit. The Auditee's personnel assisted with the provision of documentation following the audit, through secure file transfer mechanisms. The key documents reviewed during this audit are listed in the Compliance Registers against specific conditions.

4.6 Reporting

The compliance register was completed using notes and observations recorded during the site inspection / interviews and review of appropriate documentation. The completed compliance register is presented in **Appendix A**. A summary of the non-compliances identified during this audit are provided in Table 5 and Table 6. The audit criteria used to determine compliance for this audit is defined in Table 2

Table 2 - Compliance Assessment Matrix

Assessment	Criteria
Compliance	<p>Compliance</p> <ul style="list-style-type: none"> The site complies with the requirements of applicable pre-operational Consent Conditions. A judgment made by an auditor that the activities undertaken, and the results achieved fulfil the specified requirements of the audit criteria. While further improvements may still be possible, the minimum requirements are being met.
Non-Compliance	<p>Non-Compliance</p> <ul style="list-style-type: none"> Clear evidence has been collected to demonstrate the requirement has not been complied with and is within the scope of the audit. Site displays little or no evidence of compliance with the requirements of the regulatory documentation. <p>Note: Where the auditor has not been able to collect enough verifiable evidence to demonstrate that the intent and all elements of the requirement of the regulatory approval have been complied with within the scope of the audit. In the absence of enough verification, the auditor may in some instances be able to verify by other means (visual inspection, personal communication, etc.) that a requirement has been met. In such a situation, the requirement should still be assessed as not verified. As the condition cannot be verified it is treated as a non-compliance.</p>
Not Triggered	<p>Not Applicable / Not Triggered</p> <ul style="list-style-type: none"> The respective condition / requirement was not activated within the scope of the audit.
Noted	A statement or fact, where no assessment of compliance is required.

Risk levels for each non-compliance identified have been assessed in accordance with

Table 3 - Risk Assessment Matrix

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

5. Stakeholder Consultation

Table 4 - Summary of Stakeholder Inputs provides a summary of the Stakeholder Consultation undertaken by the Auditors.

Table 4 - Summary of Stakeholder Inputs

Department	Contact	Stakeholder Comments	Auditor's Response
NSW Department of Planning and Environment	James Epstein	<p>The department requests that the upcoming IEA pay particular focus to the following items:</p> <ul style="list-style-type: none"> • Implementation of the Blast Management Plan, including the completion of pre-blasting requirements and checklists; • Implementation of the Noise Management Plan, including responses to alarms and complaints from real-time noise monitors; and • Implementation of the Water Management Plan, specifically during heavy rainfall events 	<p>Addressed in the reviews of each management plan. Recommendations for improvement have been made in relation to these issues.</p>
NSW EPA	Jenny Lange	The EPA did not respond to the consultation request.	
Heritage NSW	Corey O'Driscoll	There are currently no concerns that we are aware of regarding the Mine's management of aboriginal cultural heritage over the past three years.	
Resources Regulator	Jenny Ehmsen	<p>The independent environmental audit is required to assess compliance against the relevant environmental management conditions of the mining leases up to 1 July 2022, including implementation of the mining operations plan for the site.</p> <p>From 2 July 2022, the independent environmental audit should provide an assessment of compliance with the requirements of Schedule 8A Standard conditions of mining leases, Part 2 Standard conditions, as set out in the Mining Regulation 2016. It is noted that the 7 mining leases that comprise Mount Thorley Warkworth Mine have been approved by the Regulator to be treated as a single lease for the purposes of Part 2 of Schedule 8A.</p> <p>The audit should note observations where rehabilitation procedures, practices and outcomes represent best industry practice.</p>	<p>Compliance against the original mining lease conditions and the newer standard conditions has been undertaken.</p>
Biodiversity Conservation Trust	Nicole Davis	No response was received from the BCT.	

Department	Contact	Stakeholder Comments	Auditor's Response
CCC	Col Gellatly	<p>The MTW CCC operated throughout the audit period, meeting on a quarterly basis. At the time of the last meeting during the audit period (Q1 2023), the committee comprised five community members, one stakeholder representative, one council representative and the company representatives. During the challenges of COVID, the company facilitated the meetings to occur via teleconference to permit continuation of consultation.</p> <p>Some of the key issues discussed or raised during the reporting period included:</p> <ul style="list-style-type: none"> • Blast vibration and overpressure and road closure notification systems • Blast times, road closures and restricted speed zones • Lighting and Visual Amenity • General operational and environmental performance • Operational disturbance vs. rehabilitation performance • Offset properties, Warkworth Sands Woodlands and success rate of plantings • Modification applications to the Warkworth Continuation Project • Exploration activity related to potential future underground mining • Air quality and dust management • Voluntary Planning Agreement with Singleton Council • Company communications with broader community • Aboriginal Cultural Heritage and Historic Heritage management • Community Support Programs. <p>There were actions raised during the course of CCC meetings, relating to the above and other issues, which were responded to by the company and documented in the relevant meeting minutes. The company facilitated site tour of operations during the audit period, which was attended by some members of the CCC. Representatives from the Department of Planning and Environment were invited and attended a meeting in Q4 2022 and directly answered queries from CCC members. Singleton Council representatives attended the Q1 2021 meeting to provide an update on the Voluntary Planning Agreement.</p> <p>In my view as Chairperson, the MTW CCC is operating effectively and as intended by the development consents, and in general accordance with the CCC guidelines. It is anticipated that similar key issues to those discussed during the audit period will continue to be the focus of the MTW CCC in future years.</p>	<p>CCC comments have been considered in the assessment of the rehabilitation works, blast management and subsequent road closures.</p>

Department	Contact	Stakeholder Comments	Auditor's Response
Singleton Shire Council	Mary-Anne Crawford	<p>The conditions of approval for SSD 6464 and SSD 6465, require consultation with council on a number of matters, including, but not limited to:</p> <ul style="list-style-type: none"> • Planning Agreement • Biodiversity offsetting and associated subdivision of land • Historic Heritage Management Plan • Transport • Waste (Onsite Sewerage Management System) • Rehabilitation Management Plan • Mine Closure Plan • Community Consultative Committee <p>Additionally, the conditions of approval require the Applicant to establish a community consultative committee with representation from Council and provide a copy of the Audit Report to Council. Council would expect that the audit will include evidence to support the compliance status of these conditions of approval, and of interest to council, evidence to support the following:</p> <ul style="list-style-type: none"> • The extent to which development contributions made under either a Planning Agreement or Contributions Plan have been made; • The extent of consultation with council on transport conditions, particularly in relation to transfer of ownership and subdivision to support completion of the works; • Mine closure planning to achieve the objectives set out in Table 13 of the consents; • In particular, the extent to which the applicant intends to minimise adverse socio-economic impacts associated with mine closure; • Compliance with requirements of any OSSM approval; and • Whether the various rehabilitation management and closure planning objectives/ plans/ strategies required under the various consents align to local, regional and State strategic land use planning documents, including whether these documents incorporate final land use outcomes consistent with these strategic land use planning documents. 	<p>Addressed in the reviews of each management plan. Recommendations for improvement have been made in relation to these issues.</p>

6. Statutory Compliance and Recommendations

Compliance with the Conditions of Consent and the Environment Protection Licence has been reviewed by assessing compliance against the various documentation related to the project approvals and licences listed in Section 1.3 of this report. The Compliance Register presented in Appendix A provides a detailed review of the compliance status of the site, including recommendations to address non-conformances.

6.1 Summary of Compliance Status

A summary of compliance with pre-operations statutory requirements is provided in Table 5 - Summary of Statutory Compliance. The number of conditions include relevant sub-clauses within each approval document. Note that historical non-compliances (non-compliances identified in previous IEAs, that have been actioned and closed out in the previous audit period) are identified in Appendix A, however, are not included in Table 5 or Table 6.

Table 5 - Summary of Statutory Compliance

Approval/ Licence	No. of Conditions	Compliant	Non-Compliant	Not Triggered	Noted
SSD 6464	212	149	12	38	13
SSD 6565	193	135	9	37	12
EPL 1376	143	95	6	3	39
EPL 1976	124	78	8	1	37
Mining Regs Std Conditions (post 2 July 22)	111	41	2	36	32
Mining Lease Conditions (prior to 2 July 22)	132	54	11	35	32
TOTAL	915	552	48	150	165

6.2 Non-Compliances Recommendations

Non-compliances identified during the site inspection, interviews and document reviews are recorded in detail in the Compliance Registers in **Appendix A** and are summarised in Table 6.

Note that the environmental management conditions of the original mining leases were superseded by Schedule 8A Standard Conditions of Mining Leases, Part 2 Standard Conditions, as set out in the Mining Regulation 2016, as of 2 July 2022. Compliance with the conditions of the original mining leases was required prior to this time. Table 6 also summarises the findings of the assessment of compliance against the environmental management Standard Mining Lease Conditions and the Conditions of the relevant mining leases.

Table 6 - Statutory Non-Compliances

No.	Condition	Observation	Recommendation	Risk Level
PROJECT APPROVAL – SSD 6464 (Warkworth Mine Modification 2)				
S2 C9	<p>By the end of January 2017, unless the Planning Secretary agrees otherwise, the Applicant must surrender the existing development consent (DA-300-9-2002-i) for the Warkworth mine in accordance with Section 104A of the EP&A Act.</p> <p>Following the commencement of development under this consent, the conditions of this consent shall prevail to the extent of any inconsistency with the conditions of DA-300-9-2002-i.</p>	<p>Reported as non-compliant in the 2020 Annual Review. No documentation was available to the auditor that confirmed that the existing consents had been surrendered.</p>	<p>Work with DPE is close out the surrender of the development consents.</p>	Administrative non-compliance
S3 C5	<p>From 1 January 2017, except for the land in Table 1, the Applicant must ensure that the noise generated by the Development does not exceed the noise criteria in Table 3 at any residence on privately owned land.</p>	<p>Section 6.2.2/3 of each Annual Review presents the results of the noise monthly noise monitoring undertaken by independent consultants.</p> <p>A summary of compliance is as follows:</p> <ul style="list-style-type: none"> • 2020 – no non compliances reported • 2021 - no non compliances reported • 2022 – six exceedances of the noise criteria were recorded <p>One hundred and fifty-seven (157) noise complaints were received during the audit period. This consisted of 98 complaints in 2020, 49 in 2021, 47 in 2022 and 11 in 2023 (to the end of April. The Auditor notes that that 112 of the 162 (69%) noise complaints were from five residents.</p> <p>While there has been an improvement over the life of the project in the number of complaints (325 recorded in 2016), a contributing factor to the higher number of complaints during the early operational stages may potentially be attributed to a higher proportion of activities closer to ground level, with improvements achieved over the project life due to attenuation provided by the pit depth, mine walls and in acoustic vehicle technology.</p>	<p>Review current predictive tools and processes against available models that are currently being utilised in both the mining and construction industries with the objective of:</p> <ul style="list-style-type: none"> • Identifying areas on site that have the potential to impact noise sensitive receivers; • Provides a Noise Impact Prediction Model that can be used by MTW to plan works in those areas with the objective to proactively ensure that noise from plant and equipment does not cause annoyance to local community and exceed the relevant criteria. 	Medium

No.	Condition	Observation	Recommendation	Risk Level
		<p>Prior to each shift, a predictive tool is utilised to assess potential impacts taking into account the prevailing meteorological conditions.</p> <p>MTW implements noise management and monitoring methods to identify if there is a potential issue and takes rectification action to modify operations where indicated.</p> <p>Following the receipt of noise complaints, a CRO is deployed to make observations and measure noise levels (5-minute sample). In many instances the CROs observations have verified the complaint and the noise readings have indicated that the noise levels from the mine were exceeding the relevant criteria.</p> <p>Where these potential exceedances are identified, MTW review the works being undertaken at the likely exceedance source and make changes to those works to reduce noise emissions.</p> <p>The Auditor understands that noise modelling of future works that may impact sensitive receivers is not routinely undertaken.</p>		
S3 C19a and c	<p>The Applicant must:</p> <p>a) implement all reasonable and feasible measures to minimise the:</p> <ul style="list-style-type: none"> • odour, fume and dust emissions of the development; and • release of greenhouse gas emissions from the development; <p>c) minimise the air quality impacts of the development during adverse meteorological conditions and extraordinary events (see note d to Tables 5-7 above);</p>	<p>Fifty-eight dust-related complaints were received during the audit period.</p> <p>No exceedances in dust criteria were reported during the audit period.</p> <p>Significant areas of the site have been cleared and progressive rehabilitation works are behind schedule. The Auditor also observed significant areas, that while not ready for final rehabilitation, would benefit from temporary stabilisation to help reduce dust emissions during adverse wind conditions.</p>	<p>Increase the rate of progressive rehabilitation works with the objective of meeting the established progressive rehabilitation targets.</p> <p>Prepare and implement a program for the stabilisation of unsealed / disturbed areas of the site including stockpiles, finished landforms, and disturbed areas that are not currently being actively worked / filled). The program should identify and classify all areas of the site that are currently disturbed according to the dust generation potential of those areas and establish clear targets for the stabilisation of those areas (either permanent or temporary) with the objective of meeting the requirements of the Blue Book.</p>	Medium

No.	Condition	Observation	Recommendation	Risk Level
S3 C24	<p>Unless an EPL or the EPA authorises otherwise, the Applicant must ensure that all surface water discharges from the site comply with the:</p> <p>a) discharge limits (both volume and quality) set for the development in any EPL; and</p>	<p>The Annual Returns prepared for the Environment Protection Licence 1376 noted several non-compliances with this condition. Refer to audit schedule for EPL 1376 for details.</p>	<p>A risk assessment and review of the storage capacity of the retention dams be undertaken that takes into account the increasing risk of extreme weather events, including extended duration wet weather patterns.</p>	<p>Low</p>
S3 C26 (Table 8)	<p>Design, install and/or maintain mine water storage infrastructure to ensure no discharge of mine water off-site (except in accordance with condition 24) On-site storages (including mine infrastructure dams and treatment dams) are suitably designed, installed and/or maintained to minimise permeability Maintain adequate freeboard within the pit void at all times to minimise the risk of discharge to surface waters</p>	<p>This commitment is included in Table 5.1 of the WMP.</p> <p>There have been two incidents that resulted in the discharge of mine-water.</p> <p>The incident on 4/1/21 was from a water equipment park up area has spilled from a dam into a water course reporting into Wollombi Brook, the incident resulted penalty notices issued by both the DPE and EPA. In response to the Penalty notices, WML prepared an action plan which includes several actions relating to detailed engineering assessment, design and construction of civil infrastructure for improved surface water drainage infrastructure at WML North Pit North. Correspondence from DPE and WML confirms that the detailed design works for the North Pit North drainage improvements were completed in October 2021.</p> <p>The incident on 4/7/22 was reported as an overtopping event during a greater than design rainfall event. It was reported that samples were collected with no environmental harm caused. No further actions to prevent recurrence were proposed by WML.</p>	<p>In relation to the incident on the 4/7/21, no further actions are recommended over and above the actions taken by WML in response to the incident.</p> <p>In response to the incident on the 4/7/22, it is recommended that a risk assessment and review of the storage capacity of the retention dams be undertaken that takes into account the increasing risk of extreme weather events, including extended duration wet weather patterns.</p>	<p>Low</p>
S3 C28	<p>Within 3 years of the date of commencement of development under this approval, the applicant will retire biodiversity credits of a class and number specified in Tables 9 and 10 below to the satisfaction of BCD.</p>	<p>DPE has yet to approve the retirement of biodiversity credits. However, it is acknowledged that some components such as the provision of supplementary measures (such as funding of research) have been met.</p>	<p>As the retirement of requisite credits is now over 4 years overdue, it is recommended that negotiations with the Department/BCD/BCT to reach an agreeable solution are given priority.</p>	<p>Administrative non-compliance</p>

No.	Condition	Observation	Recommendation	Risk Level
S3 C30	<p>Within 3 years of the date of commencement of the development under this consent, the Applicant must secure offset areas listed in Table 12 under an in-perpetuity conservation mechanism such as entering into a biobank agreement, in accordance with the relevant provisions of the TSC Act. The direct land-based offsets may be used as offsets for any approval required under the EPBC Act for this development.</p>	<p>Date of commencement was 15 Feb 2016, therefore offset areas were to be secured under an in-perpetuity mechanism 14 February 2019 (i.e. within 3 years of commencement).</p> <p>Despite documentation/correspondence between WML, the Department and BCD since 2018, which has included submission of a modification application to DPE (SSD-6464 MOD1) to address securing of the offsets, this item remains incomplete. actions are currently still being undertaken to reach an agreeable resolution with BCD and the department. However, no written correspondence between WML and the Department/BCD has been sited since the February 2022 correspondence.</p>	<p>As the securing of offset areas under an appropriate mechanism is now over 4 years overdue, it is recommended that negotiations with the Department/BCD/BCT to reach an agreeable solution are given priority.</p>	Administrative non-compliance
S3 C34	<p>Within 12 months of the commencement of the development under this consent, the Applicant must prepare an Integrated Management Plan for the Warkworth Sands Woodland EEC to the satisfaction of BCD. This plan must be prepared in consultation with the owners of Wambo and Bulga Mines and outline the measures that would be implemented to coordinate management and recovery efforts for the EEC.</p>	<p>Correspondence sighted confirmed that BCD had received the WSW IMP as submitted by WML. Correspondence from BCD confirmed that the review of the 2018 IMP was largely complete. However no subsequent correspondence sighted and no correspondence/documentation provided regarding approval of WSW IMP provided.</p> <p>It is noted that the WSW IMP has been prepared and provided to BCD. Non-compliance is mainly due to the document not yet being approved by BCD (i.e not approved within 12 months of the commencement of the development).</p>	<p>Work with BCD to progress the outstanding approval as a high priority.</p>	Administrative non-compliance
S3 C51	<p>The Applicant must:</p> <ol style="list-style-type: none"> a) keep records of the amount of coal transported from the development in each calendar year; and b) make these records available on its website at the end of each calendar year. 	<p>The 2020 and 2021 Annual Reviews are publicly available on the MTW website; however, the 2022 Annual Review was not on the website at the time of this IEA. Therefore, the coal transport records for 2022 were not publicly available as required by this Condition. The Auditor notes that the 2022 Annual Review had been submitted to DPE but had not yet been approved.</p>	<p>Ensure that the coal transportation records are regularly updated.</p>	Administrative non-compliance

No.	Condition	Observation	Recommendation	Risk Level
S3 C52 a and c	<p>The Applicant must:</p> <p>a) implement all reasonable and feasible measures to minimise the visual off-site lighting impacts of the development, including lighting impacts on road users and impacts of mining voids;</p> <p>c) ensure that all external lighting associated with the development complies with Australian Standard AS4282 (/NT) 1997 - Control of Obtrusive Effects of Outdoor Lighting, or its latest</p>	<p>Environmental induction covers lighting. The Lighting review undertaken in 2020 confirms the offsite lighting impacts was meeting the requirements of this condition. However, 94 lighting complaints were received during the audit period, 75 of those complaints came from three residents. A review of the complaints indicates that the community impacts are from relocatable lighting and mobile plant, but that fixed lighting is not generating complaints. As part of the internal complaint investigations, CROs assess mobile lighting and arrange changes in light locations or direction and that the actions, in general resolve the issues. It is apparent that there is insufficient planning for the location and use of mobile lighting and therefore all reasonable and feasible mitigation measures have not been used.</p>	<p>Ensure that personnel responsible for planning and / or managing night works undertake proactive planning for all after hours works. The planning should identify the optimal lighting setup for those activities and that the implementation of the lighting plans be checked prior to undertaking those activities by CROs or other appropriately trained personnel.</p>	Low
S3 C57	<p>The Applicant must 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 must be employed when areas prone to dust generation cannot yet be permanently rehabilitated.</p>	<p>Annual Review reports detail progress of mine rehabilitation progress against MOP plans.</p> <p>The net rehabilitation progress (i.e. rehabilitation minus rehabilitation disturbance) for the 2015 – 2021 period was 20.4 ha higher than targets.</p> <p>A total of 47.9ha of new rehabilitation was completed during 2022 against a Mining Operations Plan 2022 target of 35ha. 2022 annual report notes that rehabilitation and disturbance forecasts submitted to Resources Regulator (submitted in August 2022) are based on financial year periods and therefore don't align with the calendar year Annual Review reporting period and the misalignment is intended to be corrected in the Forward Program to be submitted in May 2023.</p>	<p>Increase the rate of progressive rehabilitation works with the objective of meeting the established progressive rehabilitation targets.</p>	Low
S3 C58 d, and h	<p>d) Describe how the rehabilitation of the site would be integrated with the implementation of the biodiversity offset strategy;</p>	<p>The RMP does not address the integration of the mine site rehabilitation with the biodiversity off-set strategy.</p>	<p>Review and revise the plan to include the integration of the mine site rehabilitation with the biodiversity off-set strategy.</p>	Administrative non-compliance
	<p>h) include interim rehabilitation where necessary to minimise the area exposed for dust generation;</p>	<p>The RMP does not address the interim rehabilitation of the site to minimise dust generation.</p>	<p>Review and revise the plan to include the interim rehabilitation of the site to minimise dust generation.</p>	Administrative non-compliance

No.	Condition	Observation	Recommendation	Risk Level
PROJECT APPROVAL – SSD 6465 (Mt Thorley)				
S3 C17 a and c	<p>The Applicant must:</p> <p>a) implement all reasonable and feasible measures to minimise the:</p> <ul style="list-style-type: none"> • odour, fume and dust emissions of the development; and • release of greenhouse gas emissions from the development; <p>c) minimise the air quality impacts of the development during adverse meteorological conditions and extraordinary events (see note d to Tables 5-7 above); and</p>	<p>The Air quality management plan describes the air quality management system and procedures including the predictive tools.</p> <p>Fifty-eight dust-related complaints were received during the audit period.</p> <p>No exceedances in dust criteria were reported during the audit period.</p> <p>Areas of the site are being cleared in preparation for mining, and the disposal of overburden is progressing. The planned progressive rehabilitation works are, however, behind schedule. The Auditor also observed areas, that while not ready for final rehabilitation, would benefit from temporary stabilisation to help reduce dust emissions during adverse wind conditions</p>	<p>Increase the rate of progressive rehabilitation works with the objective of meeting the established progressive rehabilitation targets.</p> <p>Prepare and implement a program for the stabilisation of unsealed / disturbed areas of the site including stockpiles, finished landforms, and disturbed areas that are not currently being actively worked / filled). The program should identify and classify all areas of the site that are currently disturbed according to the dust generation potential of those areas and establish clear targets for the stabilisation of those areas (either permanent or temporary) with the objective of meeting the requirements of the Blue Book.</p>	Medium
S3 C22 a and b	<p>Unless an EPL or the EPA authorises otherwise, the Applicant must ensure that all surface water discharges from the site comply with the:</p> <p>a) discharge limits (both volume and quality) set for the development in any EPL; and</p>	<p>The Annual Returns prepared for the Environment Protection Licence 1976 noted several non-compliances with this condition.</p> <ul style="list-style-type: none"> • Dam 1S overtopped as a result of heavy or sustained rainfall which caused significant runoff (2023 AR) • Dam 1S overtopped as a result of heavy or sustained rainfall which caused significant runoff (2021 AR) • Discharge from 9S via spillway to Loders Creek (2021 AR) 	<p>A risk assessment and review of the storage capacity of the retention dams be undertaken that takes into account the increasing risk of extreme weather events, including extended duration wet weather patterns.</p>	Low
	<p>b) relevant provisions of the POEO Act or Protection of the Environment Operations (Hunter River Salinity Trading Scheme) Regulation 2002</p>	<p>As reported in the 2021 Annual Return for EPL1976, Exceedance of the HRSTS hourly volume discharge limit during analysis of flow data following a discharge event. Note that this incident was not reported in the 2021 Annual Review.</p>	<p>The auditor understands that this discharge was an isolated event and has been investigated. No additional actions are required.</p>	Low

No.	Condition	Observation	Recommendation	Risk Level
S3 C27	<p>Within 3 years of the commencement of development under this consent, unless the Planning Secretary agrees otherwise, the Applicant must enter into a conservation agreement or agreements pursuant to section 698 of the National Parks and Wildlife Act 1974 relating to the Loaders Creek Aboriginal Cultural Heritage Conservation Area, recording the obligations assumed by the Applicant under the conditions of this consent in relation to the conservation area, and register the agreements pursuant to section 69F of the National Parks and Wildlife Act 1974.</p>	<p>The Department approved a request to extend the timeframe for completion of the agreement to the 15th of February 2020, however the agreement was not executed until the 3 November 2022.</p> <p>Whilst the conservation agreement has been entered into in November 2022, registration of the agreements has not been completed pursuant to s69F of the NPW Act.</p>	<p>Finalise the registration of the conservation agreement for Loaders Creek.</p>	<p>Administrative non-compliance</p>
S3 C29 a and b	<p>The Applicant must:</p> <p>c) keep records of the amount of coal transported from the development in each calendar year; and</p> <p>d) make these records available on its website at the end of each year.</p>	<p>The 2020 and 2021 Annual Reviews are publicly available on the MTW website; however, the 2022 Annual Review was not on the website at the time of this IEA. Therefore, the coal transport records for 2022 were not publicly available as required by this Condition. The Auditor notes that the 2022 Annual Review had been submitted to DPE but had not yet been approved.</p>	<p>Ensure that the coal transportation records are regulatory updated.</p>	<p>Administrative non-compliance</p>
S3 C30 a and c	<p>The Applicant must:</p> <p>a) implement all reasonable and feasible measures to minimise the visual and off-site lighting impacts of the development, including lighting impacts on road users and impacts of mining voids;</p> <p>c) ensure that all external lighting associated with the development complies with Australian Standard AS4282 (/NT) 1997 - Control of Obtrusive Effects of Outdoor Lighting, or its latest version; and</p>	<p>Environmental induction covers lighting. The Lighting review undertaken in 2020 confirms the offsite lighting impacts was meeting the requirements of this condition. However, 94 lighting complaints were received during the audit period, 75 of those complaints came from three residents. A review of the complaints indicates that the community impacts are from relocatable lighting and mobile plant, but that fixed lighting is not generating complaints. As part of the internal complaint investigations, CROs assess mobile lighting and arrange changes in light locations or direction and that the actions, in general resolve the issues. It is apparent that there is insufficient planning for the location and use of mobile lighting and therefore all reasonable and feasible mitigation measures have not been used.</p>	<p>Ensure that personnel responsible for planning and / or managing night works undertake proactive planning for all after hours works. The planning should identify the optimal lighting setup for those activities and that the implementation of the lighting plans be checked prior to undertaking those activities by CROs or other appropriately trained personnel.</p>	<p>Low</p>

No.	Condition	Observation	Recommendation	Risk Level
S3 C36g	The RMP must: g) include interim rehabilitation where necessary to minimise the area exposed for dust generation;	The RMP does not address the interim rehabilitation of the site to minimise dust generation.	Review and revise the plan to include the interim rehabilitation of the site to minimise dust generation.	Administrative non-compliance

No.	Condition	Observation	Recommendation	Risk Level
ENVIRONMENT PROTECTION LICENCE 1376 (WARKWORTH)				
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.	<p>The following non-compliances (generally associated with over topping of dams) were identified by the Annual Returns</p> <ul style="list-style-type: none"> • WML Sediment Dams 53N, 54N and WML sump 5N overtopped as a result of heavy rainfall - 5 in total non-compliances reported (2022 AR) • WML Sediment Dams 53N, 54N, 55N, 46N SSD 09 - 4 in total (2021 AR) • WML sediment dams 50N and 53N overtopped as a result of heavy rainfall 	A risk assessment and review of the storage capacity of the retention dams be undertaken that takes into account the increasing risk of extreme weather events, including extended duration wet weather patterns.	Low
O3.1	The premises must be maintained in a condition which minimizes or prevents the emission of dust from the premises.	<p>Fifty-eight dust-related complaints were received during the audit period.</p> <p>No exceedances in dust criteria were reported during the audit period.</p> <p>Significant areas of the site have been cleared and progressive rehabilitation works are behind schedule. The Auditor also observed significant areas, that while not ready for final rehabilitation, would benefit from temporary stabilisation to help reduce dust emissions during adverse wind conditions.</p>	<p>Increase the rate of progressive rehabilitation works with the objective of meeting the established progressive rehabilitation targets.</p> <p>Prepare and implement a program for the stabilisation of unsealed / disturbed areas of the site including stockpiles, finished landforms, and disturbed areas that are not currently being actively worked / filled). The program should identify and classify all areas of the site that are currently disturbed according to the dust generation potential of those areas and establish clear targets for the stabilisation of those areas (either permanent or temporary) with the objective of meeting the requirements of the Blue Book.</p>	Medium
M2.2	Air Monitoring Requirements: Continuous PM10 monitoring	As reported in the 2020, 2021 and 2022 Annual Returns, EPL 1376 requires continuous monitoring for EPA air monitoring Points 9, 10, 11 and 12. Monitoring data capture was >93%, but not continuous during the reporting period (4 occurrences)	Ensure that all continuous monitoring equipment is operational and well maintained.	Low

No.	Condition	Observation	Recommendation	Risk Level
M2.3	Water and/or Land Monitoring Requirements	As reported in the Annual Returns, EPL water monitoring Points 26, 27, 28 and 30 were unable to be sampled due to sample area either unsafe to access due to rain events resulting in flooding, or being dry at time of sampling (6 occurrences)	Access to the sampling sites was not possible due to adverse weather conditions. No further actions are recommended.	Administrative non-compliance
M4.1	Meteorological Monitoring Requirements	As reported in the 2021 and 2022 Annual Returns, EPL 1376 requires continuous monitoring for Charlton Ridge Meteorological Station. Monitoring data capture was >99%, but not continuous during the reporting period.	Ensure that all continuous monitoring equipment is operational and well maintained.	Administrative non-compliance
M9.3	The licence must mark monitoring point(s) 4, with a sign which clearly indicates the name of the licensee, whether the monitoring point is up or down stream of the discharge point(s) and that it is a monitoring point for the Hunter River Salinity Trading Scheme.	The required signage was not installed at the time of this IEA.	Ensure that signage for Monitoring Point 4 is installed.	Administrative non-compliance

No.	Condition	Observation	Recommendation	Risk Level
ENVIRONMENT PROTECTION LICENCE 1976 (Mt Thorley)				
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.	The following non-compliances were identified by the Annual Returns <ul style="list-style-type: none"> • Dam 1S overtopped as a result of heavy or sustained rainfall which caused significant runoff (2023 AR) • Dam 1S overtopped as a result of heavy or sustained rainfall which caused significant runoff (2021 AR) • Discharge from 9S via spillway to Loders Creek (2021 AR) 	A risk assessment and review of the storage capacity of the retention dams be undertaken that takes into account the increasing risk of extreme weather events, including extended duration wet weather patterns.	Low
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.	One non-compliance was reported during the audit period. During 2021 one Grab Sample at Licensed Discharge and Monitoring Point 4 exceeded the upper 100 percentile limit for pH.	This single exceedance of the water quality criteria has been investigated. No systemic issues have been identified therefore no further actions are recommended.	Low
L2.2	Where a pH quality limit is specified in the table, the specified percentage of samples must be within the specified ranges.	One non-compliance was reported during the audit period. During 2021 one Grab Sample at Licensed Discharge and Monitoring Point 4 exceeded the upper 100 percentile limit for pH.	This single exceedance of the water quality criteria has been investigated. No systemic issues have been identified therefore no further actions are recommended.	Low
03.1	The premises must be maintained in a condition which minimizes or prevents the emission of dust from the premises.	Fifty-eight dust-related complaints were received during the audit period. Significant areas of the site have been cleared and progressive rehabilitation works are behind schedule. The Auditor also observed areas, that while not ready for final rehabilitation, would benefit from temporary stabilisation to help reduce dust emissions during adverse wind conditions. While no exceedances in dust criteria were reported during the audit period, the number of dust related complaints and the Auditor's observations relating to rehabilitation and stabilisation indicate that nuisance dust emissions are being generated by the mine.	Increase the rate of progressive rehabilitation works with the objective of meeting the established progressive rehabilitation targets. Prepare and implement a program for the stabilisation of unsealed / disturbed areas of the site including stockpiles, finished landforms, and disturbed areas that are not currently being actively worked / filled). The program should identify and classify all areas of the site that are currently disturbed according to the dust generation potential of those areas and establish clear targets for the stabilisation of those areas (either permanent or	Medium

No.	Condition	Observation	Recommendation	Risk Level
			temporary) with the objective of meeting the requirements of the Blue Book.	
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.	<p>During 2021, 2022 and 2023 Table M2.2 requires continuous PM₁₀ monitoring for EPA air monitoring points 10,11,13 and 19. Monitoring data capture was >98% but not continuous during the reporting period.</p> <p>During 2021, 2022 and 2023 Table M2.3 requires continuous monitoring for pH at Point 4 during Discharge Monitoring data capture was >99% but not continuous during the reporting period.</p> <p>During 2021, 2022 and 2023 Table M2.3 requires continuous monitoring for conductivity at Point 4 during Discharge Monitoring data capture was >99% but not continuous during the reporting period.</p>	Ensure that all continuous monitoring equipment is operational and well maintained.	Low
M4.1	Meteorological Monitoring Requirements	As reported in the 2021 and 2022 Annual Returns, EPL 1376 requires continuous monitoring for Charlton Ridge Meteorological Station. Monitoring data capture was >99%, but not continuous during the reporting period.	Ensure that all continuous monitoring equipment is operational and well maintained.	Low
M7.1	Requirement to monitor volume or mass.	Table M7.1 requires continuous monitoring for volumetric flow at Point 4 during discharge. During 2021 monitoring data capture was not continuous during the reporting period.	Ensure that all continuous monitoring equipment is operational and well maintained.	Low
E1.3	<p>The licensee must not exceed the hourly volume discharge limit calculated using the following formula, at all discharge point(s) on this licence titled "Discharge of saline water under the Hunter River Salinity Trading Scheme (HRSTS)".</p> $H = V / RRT$	<p>As reported in the 2021 Annual Return an exceedance of the HRSTS hourly volume discharge limit occurred on 20 March 2021. This non-compliance was discovered during the preparation of the 2021 Annual Return.</p> <p>The exceedance event has been reviewed by MTW and the discharge rate modified. No further exceedances have been recorded.</p>	The single volume exceedance has been investigated and appropriate actions taken to prevent future exceedances. No additional actions have been identified.	Low

No.	Condition	Observation	Recommendation	Risk Level
MINING LEASE STANDARD CONDITIONS				
D1 C4	The holder of a mining lease must take all reasonable measures to prevent, or if that is not reasonably practicable, to minimise, harm to the environment caused by activities under the mining lease.	During the audit period (2021) non-complying overflows / discharges of water occurred from dams on both the Mt Thorley and Warkworth mines. These pollution events resulted in the issue of Penalty Notices by the EPA and DPE. For further information refer to Section 7.3 and Condition L1.1 on the EPL Compliance Registers above.	A risk assessment and review of the storage capacity of the retention dams be undertaken that takes into account the increasing risk of extreme weather events, including extended duration wet weather patterns.	Low
D1 C5	The holder of a mining lease must rehabilitate land and water in the mining area that is disturbed by activities under the mining lease as soon as reasonably practicable after the disturbance occurs.	This condition is considered to be non-compliant as the predicted/forecast target for 2020 was not met and it is predicted that the forecast for 2023 will not be met. It is acknowledged that several factors, including weather conditions, have resulted in lower rehabilitation than predicted. It is noted however that the the MOP rehabilitation targets were exceeded in both 2021 and 2022.	Continue progressive rehabilitation works with the objective of meeting the established progressive rehabilitation targets	Low

MINING LEASE ML 1412				
17	Minimise Dust	Fifty-eight dust-related complaints were received during the audit period. No exceedances in dust criteria were reported during the audit period. Significant areas of the site have been cleared and progressive rehabilitation works are behind schedule. The Auditor also observed significant areas, that while not ready for final rehabilitation, would benefit from temporary stabilisation to help reduce dust emissions during adverse wind conditions.	Increase the rate of progressive rehabilitation works with the objective of meeting the established progressive rehabilitation targets. Prepare and implement a program for the stabilisation of unsealed / disturbed areas of the site including stockpiles, finished landforms, and disturbed areas that are not currently being actively worked / filled). The program should identify and classify all areas of the site that are currently disturbed according to the dust generation potential of those areas and establish clear targets for the stabilisation of those areas (either permanent or temporary) with the objective of meeting the requirements of the Blue Book.	Medium

No.	Condition	Observation	Recommendation	Risk Level
27	Environment Protection / Prevention of Pollution	The Annual Returns prepared for the Environment Protection Licence 1276 noted several non-compliances with this condition. Refer to audit schedule for EPL 1376 for details.	A risk assessment and review of the storage capacity of the retention dams be undertaken that takes into account the increasing risk of extreme weather events, including extended duration wet weather patterns.	Low
MINING LEASE CCL 753				
2	Operate in accordance with the Mining Operations Plan	<p>Annual Review reports detail progress of mine rehabilitation progress against MOP plans.</p> <p>The net rehabilitation progress (i.e. rehabilitation minus rehabilitation disturbance) for the 2015 – 2021 period was 20.4 ha higher than targets.</p> <p>A total of 47.9ha of new rehabilitation was completed during 2022 against a Mining Operations Plan 2022 target of 35ha. 2022 annual report notes that rehabilitation and disturbance forecasts submitted to Resources Regulator (submitted in August 2022) are based on financial year periods and therefore don't align with the calendar year Annual Review reporting period and the misalignment is intended to be corrected in the Forward Program to be submitted in May 2023.</p>	Increase the rate of progressive rehabilitation works with the objective of meeting the established progressive rehabilitation targets.	Low
16	Minimise Dust	<p>Fifty-eight dust-related complaints were received during the audit period.</p> <p>No exceedances in dust criteria were reported during the audit period.</p> <p>Significant areas of the site have been cleared and progressive rehabilitation works are behind schedule. The Auditor also observed significant areas, that while not ready for final rehabilitation, would benefit from temporary stabilisation to help reduce dust emissions during adverse wind conditions.</p>	<p>Increase the rate of progressive rehabilitation works with the objective of meeting the established progressive rehabilitation targets.</p> <p>Prepare and implement a program for the stabilisation of unsealed / disturbed areas of the site including stockpiles, finished landforms, and disturbed areas that are not currently being actively worked / filled). The program should identify and classify all areas of the site that are currently disturbed according to the dust generation potential of those areas and establish clear targets for the stabilisation of those areas (either permanent or temporary) with the objective of meeting the requirements of the Blue Book.</p>	Medium

No.	Condition	Observation	Recommendation	Risk Level
25	Environment Protection / Prevention of Pollution	The Annual Returns prepared for the Environment Protection Licence 1376 noted several non-compliances with this condition. Refer to audit schedule for EPL 1376 for details.	A risk assessment and review of the storage capacity of the retention dams be undertaken that takes into account the increasing risk of extreme weather events, including extended duration wet weather patterns.	Low
MINING LEASE ML 1590				
2	Operate in accordance with the Mining Operations Plan	<p>Annual Review reports detail progress of mine rehabilitation progress against MOP plans.</p> <p>The net rehabilitation progress (i.e. rehabilitation minus rehabilitation disturbance) for the 2015 – 2021 period was 20.4 ha higher than targets.</p> <p>A total of 47.9ha of new rehabilitation was completed during 2022 against a Mining Operations Plan 2022 target of 35ha. 2022 annual report notes that rehabilitation and disturbance forecasts submitted to Resources Regulator (submitted in August 2022) are based on financial year periods and therefore don't align with the calendar year Annual Review reporting period and the misalignment is intended to be corrected in the Forward Program to be submitted in May 2023.</p>	Increase the rate of progressive rehabilitation works with the objective of meeting the established progressive rehabilitation targets.	Low

No.	Condition	Observation	Recommendation	Risk Level
13	Rehabilitate the site in accordance with the MOP	<p>Annual Review reports detail progress of mine rehabilitation progress against MOP plans.</p> <p>The net rehabilitation progress (i.e. rehabilitation minus rehabilitation disturbance) for the 2015 – 2021 period was 20.4 ha higher than targets.</p> <p>A total of 47.9ha of new rehabilitation was completed during 2022 against a Mining Operations Plan 2022 target of 35ha. 2022 annual report notes that rehabilitation and disturbance forecasts submitted to Resources Regulator (submitted in August 2022) are based on financial year periods and therefore don't align with the calendar year Annual Review reporting period and the misalignment is intended to be corrected in the Forward Program to be submitted in May 2023.</p>	<p>Increase the rate of progressive rehabilitation works with the objective of meeting the established progressive rehabilitation targets.</p>	Low
MINING LEASE ML 1751				
3	Operate in accordance with the Mining Operations Plan	<p>Annual Review reports detail progress of mine rehabilitation progress against MOP plans.</p> <p>The net rehabilitation progress (i.e. rehabilitation minus rehabilitation disturbance) for the 2015 – 2021 period was 20.4 ha higher than targets.</p> <p>A total of 47.9ha of new rehabilitation was completed during 2022 against a Mining Operations Plan 2022 target of 35ha. 2022 annual report notes that rehabilitation and disturbance forecasts submitted to Resources Regulator (submitted in August 2022) are based on financial year periods and therefore don't align with the calendar year Annual Review reporting period and the misalignment is intended to be corrected in the Forward Program to be submitted in May 2023.</p>	<p>Increase the rate of progressive rehabilitation works with the objective of meeting the established progressive rehabilitation targets.</p>	Low

No.	Condition	Observation	Recommendation	Risk Level
MINING LEASE CL 219				
2	Operate in accordance with the Mining Operations Plan	<p>Annual Review reports detail progress of mine rehabilitation progress against MOP plans.</p> <p>The net rehabilitation progress (i.e., rehabilitation minus rehabilitation disturbance) for the 2015 – 2021 period was 20.4 ha higher than targets.</p> <p>A total of 47.9ha of new rehabilitation was completed during 2022 against a Mining Operations Plan 2022 target of 35ha. 2022 annual report notes that rehabilitation and disturbance forecasts submitted to Resources Regulator (submitted in August 2022) are based on financial year periods and therefore don't align with the calendar year Annual Review reporting period and the misalignment is intended to be corrected in the Forward Program to be submitted in May 2023.</p>	<p>Increase the rate of progressive rehabilitation works with the objective of meeting the established progressive rehabilitation targets.</p>	Low
17	Minimise Dust	<p>Fifty-eight dust-related complaints were received during the audit period.</p> <p>No exceedances in dust criteria were reported during the audit period.</p> <p>Significant areas of the site have been cleared and progressive rehabilitation works are behind schedule. The Auditor also observed significant areas, that while not ready for final rehabilitation, would benefit from temporary stabilisation to help reduce dust emissions during adverse wind conditions.</p>	<p>Increase the rate of progressive rehabilitation works with the objective of meeting the established progressive rehabilitation targets.</p> <p>Prepare and implement a program for the stabilisation of unsealed / disturbed areas of the site including stockpiles, finished landforms, and disturbed areas that are not currently being actively worked / filled). The program should identify and classify all areas of the site that are currently disturbed according to the dust generation potential of those areas and establish clear targets for the stabilisation of those areas (either permanent or temporary) with the objective of meeting the requirements of the Blue Book.</p>	Medium

No.	Condition	Observation	Recommendation	Risk Level
25	Environment Protection / Prevention of Pollution	<p>The Annual Returns prepared for the Environment Protection Licence 1976 noted several non-compliances with this condition. Refer to audit schedule for EPL 1976 for details.</p> <ul style="list-style-type: none"> • Dam 1S overtopped as a result of heavy or sustained rainfall which caused significant runoff (2023 AR) • Dam 1S overtopped as a result of heavy or sustained rainfall which caused significant runoff (2021 AR) • Discharge from 9S via spillway to Loders Creek (2021 AR) 	A risk assessment and review of the storage capacity of the retention dams be undertaken that takes into account the increasing risk of extreme weather events, including extended duration wet weather patterns.	Low

6.3 Continuous Improvement Recommendations

During this IEA a number of opportunities for improvement were identified. These items are included in the Audit Schedules in Appendix A and are summarised below for consideration.

6.3.1 Water Management Plan

A site water balance was prepared as part of the Water Management Plan.

- a) It is recommended that MTW review the water balance model to take into account the impacts of climate change, for example the impacts of higher-than-normal rainfall events due to more extreme La-Nina events.
- b) That the Water Balance documented in the WMP is updated to reflect water volumes and quality from the STP, as well as any necessary treatment and/or testing of the waters discharged.

6.3.2 Rehabilitation and Offsets

- a) To improve the success of the rehabilitation works and to achieve the targets detailed in the Ecological monitoring reports, that:
 - More intensive weed control of High Threat Weeds be undertaken;
 - Control of overly dominant natives (e.g *Corymbia maculata*, *Acacia* species) via thinning or changes to seed mix; and
 - Widen the distribution of ground habitat features (such as logs);
- b) that any future modification to the Approval consider seeking to remove specific mentions of the use of the NSW Biodiversity Offsets Policy for Major Projects as this is no longer available.
- c) Warkworth Sands Woodland - Additional work is required to meet the final performance criteria, In particular it is recommended that consideration is given to amending seed mixes to include a higher diversity of non-grass native species to increase groundcover diversity.
- d) Warkworth Sands Woodland – Restoration work scheduled for 2022 was delayed due to access issues associated with inclement weather and that works have been rescheduled for 2023. Based on the ecologist field observations, further active works, particularly in regard to increasing groundcover diversity, may be required to meet the required performance criteria by Year 15.

6.3.3 Environment Protection Licence 1976

Consult with the EPA and seek an amendment to EPL 1976 to remove the typographical error in Condition M9.4.

7. Independent Audit Post Approval Requirements

This audit focused on the compliance requirements established by the Conditions of Approval. While the scope of the audit, as specified in the Conditions of Consent do not refer specifically to the DPE Independent Audit Post Approval Requirements (DPE, May 2020), for completeness the Audit has, where possible, assessed the environmental performance of the project in accordance with those guidelines. This section of the report covers the specific requirements contained in the DPE Guidelines.

7.1 Summary of Environmental Incidents

MTW records all incidents on a proprietary EHSQ management system that allows operational personnel to log incidents directly in MTW's management system. All incidents are recorded and actioned through that system. The System requires details of the incident, actions taken, incident investigation results and corrective and preventative (learnings/recommendations taken). All MTW personnel have access to that system.

Incident management procedures are described in Section 7.5 of the Environmental Management Strategy and incident response (actions) are detailed in the Pollution Incident Response Management Plan (PIRMP).

A printout from of recorded incidents was provided to the Auditor. Table 7 provides an overview of the incidents recorded during the Audit Period.

7.1.1 Reportable Incidents

During the audit period a total of 15 incidents were reported to the Department. Ten incidents were due to sediment basin overtopping following heavy rainfall events. Three noise exceedances and two blasting exceedances were also reported. Regulatory was taken by the EPA and /or DPE for the following incidents.

- 14 May 2020 - Water discharge from Dam 9S into Loders Creek. An Official Caution was issued by the EPA.
- 1 January 2019 to 31 December 2019 – exceedance of blasting limits during 2019. An Advisory Notice was issued by the EPA.
- 4 January 2021 – Water discharge from Dam 46N, 51N, 1S and the coal loader area. The EPA issued two Penalty Infringement Notices (PINs). The DPE issued an Official Caution (to Warkworth) and a PIN for \$15000 to Mt Thorley.

No Action was taken by the Resources Regulator on any of the incidents.

Table 7 - Summary of Incidents

Mine ⁽¹⁾	Incident Date	DPE Notification Date	DPE Report Submission Date	Incident Type	Incident Summary	Regulatory Action
MT	14/5/20	14/5/20	Not verified	Water discharge	Water overflowing Dam 9S spillway into Loders Creek.	EPA issued a show cause notice on the 27 May 2020 with an official caution issued on the 19 October 2020. DPE noted that EPA were investigating the incident with no further enforcement to be undertaken at the time, however, would record the incident as a breach. No action was taken by the Resource Regulator (RR).
Both	4/1/21	4/1/21	21/3/21	Water Discharge	Several incidents occurred during a wet weather event including: <ul style="list-style-type: none"> Discharge from Dam 46N into Wollombi Brook Discharge from Dam 51N into Wollombi Brook Discharge from the rail loop and coal loader area into Loders Creek Dam 1S into Loders Creek 	A written report was provided to the EPA and DPE on the 21 January 2021. EPA issued a notice to provide additional information and/or records on the 4 March 2021. Yancoal responded to the notice on April 26, 2021. EPA issued a Show Cause notice on the 13 May 2021. Yancoal provided a response on the 19 July 2021. EPA subsequently issued a two separate penalty notice for \$15000 each on the 19 July 2021 (two separate PINS were issued for Mt Thorley and Warkworth, noting the incidents related to the 2 separate EPL's. After this, DPE issued a show cause letter to Yancoal on the 22 July 2021. Yancoal responded on 3 August 2021. DPE issued an Official Caution to Warkworth on the 13 August 2021 and a Penalty Infringement Notice to Mt Thorley for \$15000 on the 13 August 2021. No action was taken by the RR.
Both	19/3/21	19/3/21	29/3/21	Water discharge	Dams overtopped following a heavy rainfall event that exceeded the Blue Book design Capacity	No regulatory action was taken by EPA, DPE or the RR.
W	11/1/21 and 12/1/21	11/11/21 and 12/1/21	Not verified	Water discharge	Sediment dams (53N and 54N) overtopped their spillways following a heavy rainfall event that exceeded the Blue Book design Capacity	No regulatory action was taken by EPA, DPE or the RR.

Mine ⁽¹⁾	Incident Date	DPE Notification Date	DPE Report Submission Date	Incident Type	Incident Summary	Regulatory Action
W	26/11/21	26/11/21	3/12/21	Water discharge	Sediment dam (53N) overtopped its spillway spillways following a heavy rainfall event that exceeded the Blue Book design Capacity	No regulatory action was taken by EPA, DPE or the RR.
W	24/2/23	24/2/22	3/2/22	Blasting exceedance	Airblast overpressure of 125.5 dB received at the Warkworth monitoring location	DPE requested additional information on the 9 August 2022 and a subsequent "Show Cause" notice on the 29 September 2022. WML responded to the "Show Cause" notice on 13 th of October 2022. DPE did not take any regulatory action, noting that a breach of Schedule 3, Condition 8 has not occurred as there were no residential or privately owned land in the Warkworth village. DPE directed WML to update and resubmit the Blast Management Plan to the department for review by the 20 th of January 2023. The revised BMP was provided to DPE by this date and was subsequently approved by DPE on the 24 th of March 2023
W	7/3/23 10/3/23	7/3/23	14/3/22	Water discharge	Sediment dams (53N, 54N and 55N) overtopped following a heavy rainfall event that exceeded the Blue Book design Capacity. The event took place over two days with initial notification to DPE on the 7/3/23	No regulatory action was taken by EPA, DPE or the RR.
W	26/3/22	26/3/22	1/4/22	Water discharge	Sediment dam (53N) overtopped its spillway spillways following a heavy rainfall event that exceeded the Blue Book design Capacity	No regulatory action was taken by EPA, DPE or the RR.
W	6/4/22	6/4/22	14/4/22	Noise exceedance	Noise exceedances measured on Wambo Road	
W	3/7/22 to 8/7/22	3/7/22	12/7/22	Water discharge	Sediment dams (53N and 54N and 55N) overtopped its spillways following a heavy rainfall event that exceeded the Blue Book design Capacity. The event took place over two days with initial notification to DPE on the 7/3/23	DPE provide an extension of time for the submission of the report till 18 July 2022. No regulatory action was taken by EPA, DPE or the RR.
MT	5/7/22	5/7/22	Not Verified	Water discharge	Sediment dam (1S) overtopped following a heavy rainfall event that exceeded the Blue Book design Capacity.	No regulatory action was taken by EPA, DPE or the RR.

Mine ⁽¹⁾	Incident Date	DPE Notification Date	DPE Report Submission Date	Incident Type	Incident Summary	Regulatory Action
W	20/7/22	21/7/22	28/7/22	Noise exceedance	Noise exceedance measured on Inlet Road and Wambo Road	DPE notified on 21/07/2022 in accordance with S5 C7 of SSD-6464. Written incident report provided to DPE on 28/07/22. DPE letter received 12/12/22 confirming that the department will carefully review the incident and may request further information in relation to the matter. DPE issued Show Cause Notice on 17/01/23. WML responded to Show Cause Notice on 10/02/23. Additional notice issued on 10/3/23 requesting further information and records, with a response required by 24/03/23. Response and data provided to DPE on 24/3/22. Show Cause Notice received on 13/04/2023. Original response due by 27/04/2023 however this was extended in writing by DPE to 11/05/2023. MTW responded to Show Cause Notice on 11/05/2023. DPE issued Official Caution on 22/06/2023.
W	14/9/22	15/9/22	21/9/22	Noise Exceedance	Noise exceedances measured on Wambo Road	No regulatory action was taken by EPA, DPE or the RR.
W	8/10/22	8/10/22	14/10/22	Water discharge	Sediment dam (1S) overtopped following a heavy rainfall event that exceeded the Blue Book design Capacity.	No regulatory action was taken by EPA, DPE or the RR.

Note 1 : W = Warkworth, MT = Mt Thorley, Both = applicable to both Mt Thorley and Warkworth.

7.1.2 Non-Reportable Incidents

During the audit period, a total of 39 incidents occurred. These incidents were not reported to the Department or other agencies as they were contained on site and did not result in environmental harm (actual or potential).

A summary of the incidents is as follows:

- 19 of the incidents involved fuel or hydraulic oil spills which were contained on site and cleaned up
- Single incidents were recorded for a small grass fire, the incorrect location of a piezometer and the late submission of the annual HRSTS report to EPA.

7.1.3 Incident Response Assessment

During this IEA the Auditor accessed the incident management system and reviewed the Incident Register. The system implemented by MTW is documented in the Environmental Management Strategy and includes:

- Incident reporting;
- Implementation of immediate response actions;
- Incident investigation;
- Development of corrective and preventative actions;
- Reporting (internal and external): and
- Incident record management.

The Auditor sighted evidence that the incident management system is understood and being implemented.

7.2 Summary of Complaints

A complaints register is maintained for internal use that contains details of each complaint received during the Audit Period was provided to the Auditor. A high-level summary of the register is available in each of the monthly monitoring reports that are provided on the company website.

Four hundred and ninety-six (496) complaints were received during the Audit Period. Table 8 provides a high-level summary of those complaints.

Table 8 - Complaints Summary

Complaints	Noise	Dust	Blast	Lighting	Other	Total
May-20	4	4	11	6	1	26
Jun-20	8	1	10	7	0	26
Jul-20	4	2	12	5	0	23
Aug-20	6	4	3	6	0	19
Sep-20	14	0	3	1	0	18
Oct-20	6	2	6	1	0	15
Nov-20	9	1	3	3	0	16
Dec-20	5	1	3	4	0	13
Jan-21	1	0	6	4	1	12
Feb-21	4	0	3	0	0	7
Mar-21	5	0	3	3	1	12
Apr-21	6	2	1	10	0	19
May-21	3	1	10	5	0	19
Jun-21	2	0	4	0	0	6
Jul-21	1	0	5	3	1	10
Aug-21	12	8	5	1	0	26
Sep-21	3	11	7	8	1	30
Oct-21	4	8	1	0	0	13
Nov-21	5	2	9	0	0	16
Dec-21	3	0	4	0	0	7
Jan-22	2	1	4	0	0	7
Feb-22	8	0	5	0	1	14
Mar-22	8	0	3	0	0	11
Apr-23	1	0	7	6	0	14
May-22	4	0	6	1	0	11
Jun-22	0	1	4	1	0	6
Jul-22	7	0	5	0	1	13
Aug-22	3	0	5	0	0	8
Sep-22	2	0	2	2	0	6
Oct-22	7	1	3	2	0	13
Nov-22	2	0	3	5	1	11
Dec-22	3	1	0	3	0	7
Jan-23	1	2	2	3	0	8
Feb-23	4	5	4	0	0	13
Mar-23	5	7	0	4	0	16
Apr-23	3	1	0	0	0	4
Audit Period Totals	165	59	162	94	8	496

7.2.1 Assessment and Observations

During the Audit Period a total of 496 complaints were recorded. Of those:

- 165 were related to noise;
- 59 were related to dust;
- 162 were related to blasting; and
- 94 were related to external lighting impacts

The Auditor sampled approximately 25% of the complaints, and made the following observations:

A significant portion of the complaints are generated by five residents with 39% coming from one complainant.

Blasting complaints are generally concerned with blast associated noise and vibration however, blast monitoring confirms that there have been only one exceedance in the relevant criteria during the audit period.

Many of the dust complainant's observations were confirmed by CRO's observations that indicate off-site migration of dust, the review of dust monitoring results however was inconclusive. However, the number of dust complaints indicates that dust emissions from the mine impact local residences routinely.

The majority of the noise complaints observations were verified by CRO investigations that confirm that the operations are often audible at nearby residential properties, this does not automatically indicate an exceedance of the approved noise criteria. However, there were a reasonable number of instances where the CROs have undertaken monitoring and confirmed that the noise levels exceed the noise criteria. It is noted that actions are taken by MTW to modify operations to be within noise criteria within 75 minutes, as is described in the MTW noise management plan. This is recorded in the CRO shift report and reviewed by E&C team on each occasion to confirm compliance.

Lighting— there were a significant number of lighting complaints, the CRO investigations often confirming that lighting on operational areas is routinely adversely impacting the complainants. It is noted that the external lighting audit commissioned by MTW (including LUX readings) did not identify a non-compliance against the Australian Standard for mobile lighting plant but considered that improvements were possible. The Auditor considers that there is sufficient evidence to raise a non-compliance against this condition, as the placement and management of external lighting is not consistently meeting the requirements of the Australian Standard AS4282 1997 - Control of Obtrusive Effects of Outdoor Lighting,

7.2.2 Compliant Management System Assessment

During this IEA the Auditor accessed the complaints management system and reviewed the Incident Register. The system implemented by MTW is documented in Section 6.5 of the Environmental Management Strategy and includes:

- Complaint reporting;
- Communication protocol (initial and on-going contact with complainants);
- Compliant investigation;
- Development of corrective and preventative actions (where appropriate);
- Reporting (internal and external);
- Complaint record management.

The Auditor sighted evidence that the complaints management system is understood and being implemented.

7.3 Summary of Notices

7.3.1 Notices Issued by the DPE

The following notices were issued by DPE during the Audit Period:

- Letter titled "Mount Thorley Warkworth Complex – SSD-6454 (Mt Thorley Continuation Project) Uncontrolled Discharge Dam 9S – 14 May 2020. The letter noted the incident report provided by MTW regarding the non-compliant discharge and stated that as the EPA was investigating that no regulatory action would be taken by the Department.
- Show Cause Notice Alleged Breach of Section 4.2 of the Environmental Planning and Assessment Act 1979, dated 13 July 2021. The notice was in relation to the overflow of Dam 46N during a rainfall event on 4 January 2021.
- Show Cause Notice Alleged Breach of Section 4.2 of the Environmental Planning and Assessment Act 1979, dated 13 May 2021 and revised on 22 July 2021. The notice was in relation to the overflow of Dam 1S during a rainfall event on 4 January 2021.
- Official Caution Breach of Section 4.2 of the Environmental Planning and Assessment Act 1979 dated 23 July 2021. The caution related to the overflow from Dam 46N on 4 January 2021.
- Penalty Notice - Breach of Section 4.2 of the Environmental Planning and Assessment Act 1979, dated 23 July 2021. The caution related to the overflow from Dam 1S on 4 January 2021.
- Show Cause Notice Alleged Breach of Section 4.2 of the Environmental Planning and Assessment Act 1979, dated 29 September 2022. The notice was in relation to the blast related incident on 24 February 2022.
- Advisory Notice – Blast Exceedance 24 February 2022. The notice informed MTW that the Department's investigations had determined that no non-compliance had occurred.

7.3.2 Notices Issued by the Environment Protection Authority

The following notices were issued by the EPA during the audit period:

- EPL 1376 (Warkworth) – Penalty Notice 3173530499 issued 19 July 2021 – Pollution of Waters (4 January 2021).
- EPL 1976 (Mt Thorley) – Penalty Notice 3173530480 issued 19 July 2021 – Pollution of Waters (5 January 2021).

7.3.3 Notices Issued by the Resources Regulator

The following notices were issued by the RR during the audit period:

- Coal Lease 219 and 1752 – Section 240 Notice – following issue of a Section 240 Notice on 5 July 2019, MTW commissioned an Independent Report. The report identified discrepancies between the rehabilitation phases reported in the 2018 Annual Report and the inspection results by the independent person. This notice directed MTW to revise and resubmit the MOP to address the discrepancies and to provide a revised Rehabilitation Cost Estimate.
- Coal Lease 753, 1590, 1751 and 1547 – Section 240 Notice – following issue of a Section 240 Notice on 5 July 2019, MTW commissioned an Independent Report. The report identified discrepancies between the rehabilitation phases reported in the 2018 Annual Report and the inspection results by the independent person. This notice directed MTW to revise and resubmit the MOP to address the discrepancies and to provide a revised Rehabilitation Cost Estimate.

- Coal Lease 219 (Condition 2) – Official Caution issued 31 August 2021 - On 18 May 2021 the Regulator performed a Landform Establishment Targeted Assessment Program (TAP) at the Mount Thorley Warkworth Complex and identified that Mount Thorley Operations Pty Limited had not met rehabilitation commitments contained in the approved MOP (MAAG0006668).
- Coal Lease 753 (Condition 2(a)) - Official Caution issued 31 August 2021 - On 18 May 2021 the Regulator performed a Landform Establishment Targeted Assessment Program (TAP) at the Mount Thorley Warkworth Complex and identified that Mount Thorley Operations Pty Limited had not met rehabilitation commitments contained in the approved MOP (MAAG0006668).

7.4 Project Environmental Management System

The Auditor reviewed the systems in place to manage environmental compliance at the mine and the following general observations were made:

- MTW operates under a formal site Safety, Health, Environment, and Community (HSEC) Management System. The Environmental Management Strategy that was prepared as a requirement of the Planning Approval describes the environmental management elements of the HSEC System and is generally consistent with the requirements of ISO 14001:2014. While the HSEC System is not certified to ISO 14001, the high level of compliance identified in this, and the previous audit indicates the system is implemented and effective.
- A computer-based environmental record-keeping system (Intelex database) is utilised.
- Environmental records are maintained by the Environmental Team and access to the records requested by the Auditor was reasonably efficient.
- In general compliance requirements are communicated to operational personnel through the site-specific induction process.
- Effective signage is used around the site, for example to show workers where to disposed of wastes.
- A centralised incident register has been developed; and relevant incident related records are maintained.
- The site employs an Environmental and Community Manager and environmental advisors.

The Auditor notes based on observations made during the Audit and review of environmental records it is clear that the Environmental Management Strategy is being implemented and is appropriate.

During this Independent Environmental Audit forty-eight (48) non-compliances have been identified, although it is noted that a significant number of the non-compliances are duplicated across the ten Approval documents that were assessed during this audit. In addition, during this audit period almost five hundred complaints were received, albeit a significant portion of those complaints came from five residents. While the Auditor is of the view that the EMS and related management processes are appropriate, that the tools used to monitor and manage the impacts of noise, blasting and dust are not optimal. Refer to the recommendations provided in relation to the noise, dust and lighting non-compliances.

7.5 Implementation of the Operational Environmental Management Plan and Sub-plans

The Conditions of Approval required the preparation and implementation of the following management plans:

1. Environment Management Strategy;
2. Aboriginal Heritage Management Plan;
3. Historic Heritage Management Plan;
4. Air Quality Management Plan;
5. Noise Management Plan;
6. Blast Management Plan;
7. Water Management Plan;
8. Biodiversity Management Plan, that includes the Biodiversity Off-set Strategy; and
9. Rehabilitation Management Plan.

During the document review phase of the project the contents of each of the plans were reviewed. All plans have been reviewed and revised to ensure that the contents are up to date and meet all of the requirements of the Project Approval during this audit period.

During the site inspection the Auditor reviewed (by sampling elements from each plan) the implementation of the management plans and determined that the operations are being conducted in general accordance with the approved plans.

7.6 Status of Previous IEA Findings

The previous audit (2020 IEA) was completed in July 2020. Table 9 lists each non-compliance identified during the 2020 Audit and the status of those non-compliance. Of the twenty-eight non-compliances recorded in the 2020 Independent Environmental Audit, the majority have been actioned and closed. A review of the outstanding recommendations from the 2017 IEA verified that all non-compliance findings had been closed out.

Table 9 - Status of 2020 Audit Findings

Condition	Detail	2020 Audit Finding	Recommendation	Status
SSD 6464				
Sch 2 Cond 2(b)	The Applicant must carry out the development in (b) accordance with the conditions of this consent.	Some non-compliances identified in SSD 6464 as described below.	Work with relevant regulators to resolve non compliances in this table.	Closed
Sch 2 Cond 9	By the end of January 2017, unless the Planning Secretary agrees otherwise, the Applicant must surrender the existing development consent (DA-34/95) for the Mt Thorley mine in accordance with Section 104A of the EP&A Act.	The application to surrender DA-300-9-2002-i has not been approved by DPIE. Email from DPIE dated 3/3/20 states that DPIE does not have capacity to complete the surrender and will complete in “the near future”.	Follow up with DPE to seek surrender notice.	DPE requested further information in 2021. MTW has yet to provide that information. OPEN
Sch 3 Cond 8	The Applicant must ensure that the blasting on the site does not cause exceedances of the criteria in Table 4.	Three blast non-compliances during the IEA period. Two blasts exceeded the blast criteria of 120 dBA (28/12/18, 4/4/19). One blast was an administrative non-compliance for failure to capture the blast at the monitor (5/7/18). A penalty notice was issued from DPIE for the blast exceedance occurring on the 4/4/19.	Implement continuous improvement practices with the aim to avoid any blast exceedances.	Blasting procedures were updated during the audit period. One blast related incident reported during the Audit Period. Closed

Condition	Detail	2020 Audit Finding	Recommendation	Status
Sch 3 Cond 14(a)	<p>During mining operations on site, the Applicant must:</p> <ul style="list-style-type: none"> • implement all reasonable and feasible measures to: • protect the safety of people and livestock in the surrounding area; • protect public or private infrastructure/property in the surrounding area from any damage; and • minimise the dust and fume emissions of any blasting; 	<p>Blast dust incident on 7/8/19. The blast dust travelled to the east over land associated with Warkworth Coal Mine, Putty Road, and the Mount Thorley Industrial Estate before dissipating over farmland east of the licenced premises. A penalty notice was issued by the EPA for the blast dust incident.</p>	<p>Implement continuous improvement practices with the aim to avoid dust blast events.</p>	<p>Blasting procedures were updated during the audit period. One blast related incident reported during the Audit Period.</p> <p>CLOSED</p>
Sch 3 Cond 26	<p>The Applicant must comply with the performance measures in Table 8 to the satisfaction of the Planning Secretary</p>	<p>Two water management incidents (4/12/17 and 30/3/19) which incurred MTW three penalty notices and one caution.</p>	<p>Implement continuous improvement practices with the aim to avoid any water management incidents and implement improvements.</p>	<p>Further water discharge incidents have occurred during this audit period however actions taken by MTW in response to the previous audit period incidents met the intent of the recommendation.</p> <p>Closed</p>
Sch 3 Cond 28	<p>Within 3 years of the date of commencement of development under this approval, the applicant will retire biodiversity credits of a class and number specified in Tables 9 and 10 below to the satisfaction of BCD.</p>	<p>The condition requires retirement of the required biodiversity credits within 3 years of the development commencing (i.e. by 14 February 2019). Although correspondence with regulators has occurred regarding progress to date, including issues with changing biodiversity legislation, possible timelines to complete, and correspondence on impending administrative non-compliance with this condition, there is no evidence available that the timelines proposed for the</p>	<p>At next modification consider requesting amendment to condition to facilitate extension to time by adding "or with the agreement of the Secretary" after "approval" consistent with other contemporary approvals.</p>	<p>Noted</p>

Condition	Detail	2020 Audit Finding	Recommendation	Status
		retirement of biodiversity credits has been achieved. No formal extension to the 3-year timeframe can be granted by DPIE as the condition does not allow the Secretary to grant one.		
Sch 3 Cond 30	Within 3 years of the date of commencement of the development under this consent, the Applicant must secure offset areas listed in Table 12 under an in-perpetuity conservation mechanism such as entering into a biobank agreement, in accordance with the relevant provisions of the TSC Act. The direct land-based offsets may be used as offsets for any approval required under the EPBC Act for this development.	No evidence that offset areas listed in Table 12 have been secured under an in-perpetuity conservation mechanism in accordance with the relevant provisions of the Threatened Species Conservation Act.	Continue to progress long term security mechanism for ecology offset areas with relevant regulators.	The offset areas have not yet been secured in accordance with this condition. MTW continue to progress engagement path with BCD. OPEN
Sch 3 Cond 34	Within 12 months of the commencement of the development under this consent, the Applicant must prepare an Integrated Management Plan for the Warkworth Sands Woodland EEC to the satisfaction of BCD. This plan must be prepared in consultation with the owners of Wambo and Bulga Mines, and outline the measures that would be implemented to coordinate management and recovery efforts for the EEC.	2017 audit confirmed it sighted evidence of consultation with neighbouring mines and OEH. OEH has not confirmed whether the Integrated Management Plan for the Warkworth Sands Woodland EEC is to their satisfaction.	Follow up with OEH to confirm that Integrated Management Plan for the Warkworth Sands Woodland EEC is to their satisfaction.	The WSW IMP has been prepared and provided to BCD not yet being approved. OPEN
Sch 3 Cond 43(c)	The Applicant must prepare an Aboriginal Heritage Management Plan for the development to the satisfaction of the Planning	The research program as part of the AHMP has not been progressed and was due to be implemented in August 2017.	Access to the sand bodies with HVO should be resolved. If access cannot be granted, discussions should occur with relevant regulators and modify the ACHMP to	OPEN

Condition	Detail	2020 Audit Finding	Recommendation	Status
	<p>Secretary and carry out the development in accordance with this plan. The plan must:</p> <p>c) Include a research program, that has been prepared by suitable qualified and experienced persons whose appointment has been approved by the Planning Secretary, for locating and evaluating sand bodies of likely early Pleistocene and early Holocene age that may contain evidence of Aboriginal habitation in the Upper Hunter Valley.</p>		<p>relocate the Research Program requirement. The Research Program on MTW should be progressed.</p>	
<p>Sch 3 Cond 51b</p>	<p>The Applicant must:</p> <p>a) keep records of the amount of coal transported from the development in each calendar year; and</p> <p>b) make these records available on its website at the end of each calendar year.</p>	<p>At the time of the IEA site visit, coal transport amounts were not reported on the website or in the Annual Review. The Annual Review has since been updated and coal transport amounts are now included in Section 4.3.</p>	<p>Continue to report coal transport amounts in Section 4.3 of the Annual Review.</p>	<p>The required data is reported in the ARs during this Audit Period. Closed</p>
<p>Sch 3 Cond 55(c)</p>	<p>The Applicant must:</p> <p>c) monitor and report on effectiveness of the waste minimisation and management measures in the Annual Review.</p>	<p>No evidence that waste minimisation and management measures are reported in the Annual Review.</p>	<p>Waste minimisation and management measures should be described in future ARs.</p>	<p>The required data is reported in the ARs during this Audit Period. Closed</p>

Condition	Detail	2020 Audit Finding	Recommendation	Status
Sch 3 Cond 57	The Applicant must 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 must be employed when areas prone to dust generation cannot yet be permanently rehabilitated.	There were ongoing delays in the progression of rehabilitation areas identified by the Resources Regulator for which MTW received a Section 240 notice.	Complete undertaking actions described in Section 240 notice issued by the Resource Regulator.	These actions in the 240 notices have been completed. Closed.
Sch 5 Cond 5(a)	Within 3 months of: a) the submission of an: • annual review under condition 4 above; • incident report under condition 7 below; • audit report under condition 9 below; or	No evidence that a revision of the strategies, plans and programs was undertaken following the: <ul style="list-style-type: none">• 4 Dec 2017 Water Incident; and• 28 Dec 2018 Blast Incident.	Records should be kept that review undertaken after each AR (could be included in AR), incident report (could be included in report) and audit to fulfil this condition in future.	Closed
Sch 5 Cond 7	The Applicant must immediately notify the Planning Secretary and any other relevant agencies of any incident. Within 7 days of the date of the incident, the Applicant must provide the Planning Secretary and any relevant agencies with a detailed report on the incident, and such further reports as may be requested.	In regard to the 4 December 2017 Water Incident, no evidence that Secretary was notified within 7 days.	Ensure future incidents are reported to DPIE within 7 days.	Closed

Condition	Detail	2020 Audit Finding	Recommendation	Status
SSD 6465				
Sch 2 Cond 2(b)	The Applicant must carry out the development in (b) accordance with the conditions of this consent.	Some non-compliances identified in SSD 6464 as described below.	Work with relevant regulators to resolve non compliances in this table.	Closed
Sch 3 Cond 6	The Applicant must ensure that the blasting on the site does not cause exceedances of the criteria in Table 4.	At the end of the 12-month 2019 calendar year, one Mt Thorley blast at the Wollemi Peak Road monitoring location exceeded 5 mm/s. This represented 6.3% of blasts which his greater than the allowable 5% of blasts. DPIE have advised that no further action would be taken at this time regarding the incident.	Implement continuous improvement practices with the aim to avoid any blast exceedances.	Blasting procedures were updated during the audit period. One blast related incident reported during the Audit Period. Closed
Sch 3 Cond 27	Within 3 years of the commencement of development under this consent, unless the Planning Secretary agrees otherwise, the Applicant must enter into a conservation agreement or agreements pursuant to section 698 of the National Parks and Wildlife Act 1974 relating to the Loders Creek Aboriginal Cultural Heritage Conservation Area, recording the obligations assumed by the Applicant under the conditions of this consent in relation to the conservation area, and register the agreements pursuant to section 69F of the National Parks and Wildlife Act 1974.	No evidence that the Loders Creek Aboriginal Cultural Heritage Conservation Area has been entered into a Conservation Agreement.	Progress establishment of the Loders Creek Heritage Conservation Area Agreement with relevant regulators.	The Loders Creek Heritage Conservation Area Agreement has been completed. Closed
Environment Protection Licence (EPL) 1376				

Condition	Detail	2020 Audit Finding	Recommendation	Status
L.5	Blasting in or on the premises must only be carried out between 0700 hours and 1800 hours, Monday to Saturday. Blasting on the premises must not take place on Sundays or Public Holidays without prior approval of the EPA.	As reported in the EPL Annual Returns, during the IEA period, there were two non-compliances against L5.2 for blast events on 4/4/19 and 28/12/18, discussed in Sch 3 Cond 8 of SSD 6464). A further non-compliance in 2017 for low level fume emitted from West Pit. This is the same non-compliance as for SSD 6464 Sch 3 Cond 8 and 14a.	Implement continuous improvement practices with the aim to avoid any blast exceedances.	Blasting procedures were updated during the audit period. One blast related incident reported during the Audit Period. Closed
O1.1	Licensed activities must be carried out in a competent manner. This includes: a) The processing, handling, movement and storage of materials and substances used to carry out the activity; and b) The treatment, storage, processing, reprocessing, transport and disposal of waste generated by the activity.	As reported in the EPL Annual Returns, during the IEA period, there were two non-compliances against O1.1 for sediment dam overtop at Dam 53N and for separate water incident on 4/12/17. This is the same non-compliance as for SSD 6464 Sch 3 Cond 26.	Implement continuous improvement practices with the aim to avoid any water management incidents and implement improvements.	The continuous improvement actions have been implemented. Closed
M2.1 M2.2	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.	As reported in the EPL Annual Returns, during the IEA period, there was a non-compliance against M2.2 for non-continuous data capture and non-compliance against M2.3 for not providing quarterly effluent monitoring samples.	Ensure non continuous data capture for quarterly effluent monitoring samples is collected.	The EPL has been updated to remove superseded monitoring points. Closed
M4.1	The licence must collect and analyse meteorological data on the premises for each weather parameter specified in column 1.	As reported in the EPL Annual Returns, during the IEA period, there was one non-compliance against M4.1 for failure to	Implement continuous improvement practices with the aim to capture all met station data.	Met Station data collection reliability improved.

Condition	Detail	2020 Audit Finding	Recommendation	Status
	The licensee must use the sampling method, units of measure and sample at the frequency specified opposite in the other columns	capture continuous data at the Charlton Ridge met station. This has been resolved.		Closed.
G2 E1		As reported in the EPL Annual Returns, during the IEA period, there was one non-compliance against E1.1 for dam 46N. This is the same non-compliance as for SSD 6464 Sch 3 Cond 26.	Implement continuous improvement practices with the aim to avoid any water management incidents and implement improvements.	The continuous improvement actions have been implemented. Closed
EPL 1976				
L5	Blasting in or on the premises must only be carried out between 0700 hours and 1800 hours, Monday to Saturday. Blasting on the premises must not take place on Sundays or Public Holidays without prior approval of the EPA.	Non-compliance for 5% of blasts <5mm/sec in EPL reporting period, reported in Annual Return for MTO 1976 submitted to EPA on 29/5/20. Discussed further in SSD 6465 Sch 3 Cond 6. This is the same non-compliance as for SSD 6465 Sch 3 Cond 6.	Implement continuous improvement practices with the aim to avoid any blast exceedances.	Blasting procedures were updated during the audit period. One blast related incident reported during the Audit Period. Closed
M2	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.	As reported in the EPL Annual Returns, during the IEA period, there was one non-compliance against M2.2 for non-continuous data capture and against M2.3 for failure to sample at monitoring point 3. There were also non-compliances against Condition M.2 for failure to sample at monitoring point 3. This has been resolved.	Implement continuous improvement practices with the aim to capture all air quality station data.	Air quality data collection reliability improved. Closed.

Condition	Detail	2020 Audit Finding	Recommendation	Status
M4	The licence must collect and analyse meteorological data on the premises for each weather 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	As reported in the EPL Annual Returns, during the IEA period, there were two non-compliances against M4.1 for failure to capture continuous data at the Charlton Ridge met station. This has been resolved.	Implement continuous improvement practices with the aim to capture all met station data.	Met Station data collection reliability improved. Closed.
Consolidated Coal Lease (CCL) 753				
Cond 56	Settling Dams or other dams to be constructed on the subject areas shall be constructed, maintained and sealed to the satisfaction of the District Inspector.	Dam 48N was constructed in 2017 within CCL 753 to control sediment within Warkworth Pit in accordance with the Water Management Plan. The Water Management Plan (WMP) states that erosion and sediment controls will be designed generally in accordance with the 'Blue Book': Managing Urban Stormwater: soils and construction, but there is no evidence that Mining, Exploration and Geoscience (MEG) (or the District Inspector of Coal Mines) approved the WMP or the construction of Dam 48N. It is noted that this temporary sediment Dam 48N has been mined through during the audit period.	Seek approval from District Inspector of Coal Mines for any new dams required to be constructed within this lease prior to construction. This may form part of a revised MOP.	Condition is no longer required in the Standard Conditions of Mining Leases. Closed.

Condition	Detail	2020 Audit Finding	Recommendation	Status
Mining Lease (ML) 1751				
Cond 5	(a)The lease holder must notify the Department of all: (i)breaches of the conditions of this mining lease or breaches of the Act causing or threatening material harm to the environment; and (ii)breaches of environmental protection legislation causing or threatening material harm to the environment (as defined in the Protection of the Environment Operations Act 1997),	No evidence that the Secretary was notified within seven days of the 4/12/17 Water Incident. This is the same non-compliance as for SSD 6464 Sch 5 Cond 7.	Ensure future incidents are reported to DPIE within 7 days.	Closed
Coal Lease (CL) 219				
Cond 21	If so directed by the Minister the lease holder shall rehabilitate to the satisfaction of the Minister any lands within the subject area which may have been disturbed by the lease holder.	Section 240 notice received from the Resources Regulator during the IEA period. This is the same non-compliance as for SSD 6464 Sch 3 Cond 57.	Complete undertaking actions described in Section 240 notice issued by the Resource Regulator.	These actions in the 240 notices have been completed. Closed.

7.7 Specialist Auditor Reports

The technical specialist's inputs for this IEA have been integrated into the Audit Schedules in Appendix A. Therefore, no standalone specialist auditor reports were prepared as part of this audit.

7.8 Operational Environmental Impacts

The assessment of actual impacts against those predicted in the Environmental Impact Statements for both the Mt Thorley and Warkworth continuation projects:

- Mt Thorley Operations Continuation 2014 Environmental Impact Statement, dated June 2014, prepared by EMM Consultants; and
- Warkworth Continuation 2014 Environmental Impact Statement, dated June 2014, prepared by EMM Consultants.

The high-level assessment of predicted vs actual impacts is provided in Table 10 below. The actual impacts of the operations were taken from the 2020, 2021 and 2022 Annual Reviews.

Table 10 - Predicted vs Actual Impacts

Category	Predicted Impact	Actual Impact
Mt Thorley Operations Continuation Project		
Operational Noise	Operational Noise would not further impact locations not already significantly impacted by noise from the mine. Operational Noise would significantly impact one location (149). That location is within the Acquisition by Request zone. No significant exceedances for properties in Bulga.	A small number of noise complaints were received and no exceedances in noise levels were recorded during the audit period.
Blasting Noise and Vibration	Blasting Impacts would not increase (over those predicted in the original EIS).	No blast complaints were received during the audit period. The impacts were generally in line with the EIS predictions.
Air Quality	No significant air quality (dust) impacts were predicted at any residences other than fifteen mine owned properties and two privately owned residences (77 and 264) that may experience dust levels above the relevant criteria for 24hr and annual average PM10. No impacts from Blast Fume were predicted.	A significant number of dust complaints were received during the audit period however, no exceedances of dust criteria recorded.
Ecology	The vegetation and habitats of the site have been previously cleared and no other additional clearing of vegetation is required. Impacts on vegetation from the operations (dust, run-off, over burden placement, tailings management) were rated as low or no-impact. Rehabilitation is expected to improve the biodiversity value of the region, as rehabilitation progresses across the site.	There was no unapproved clearing of any areas during the audit period. However progressive rehabilitation has not met the targets set in the MOP (Rehabilitation Management Plan).

Category	Predicted Impact	Actual Impact
Visual Amenity	The existing operations generated visual impacts consistent with an operational mine. While the continuation project was predicted to have low visual impact, some areas around Bulga Village were likely to experience high visual impact.	General visual impacts are consistent with predictions in the EIS, however lighting impacts associated with mobile plant has resulted in a significant number of complaints from eleven local residents.
Groundwater	Groundwater levels are significantly impacted by the mining operations and groundwater flows towards the open cut pits. The filling of the Lodars Pit during the closure operations is predicted to reduce groundwater take from the site in the long term.	Groundwater impacts are in line with EIS predictions.
Surface Water	The operations were predicted to have no significant impact on surface water of adjacent water features (ie off-site).	There have been unapproved surface water discharges during the audit period, however no indications that water impacts exceed those predicted in the EIS.
Aboriginal Cultural Heritage	No unapproved impacts on aboriginal cultural heritage were predicted.	No unapproved impacts on aboriginal cultural heritage were recorded.
Historic Heritage	No unapproved impacts on historic (built) heritage were predicted.	No unapproved impacts on historic (built) heritage were recorded.
Traffic and Transport	No significant (increased) impacts on local roads were predicted.	No significant impacts on local roads were identified.
Rehabilitation	Progressive rehabilitation commitments are outlined in the Warkworth Continuation 2014 and Mt Thorley Operations 2014 EIS. These documents modelled a total of 1,103 ha of rehabilitation to be completed by end of 2017, and a further 504.8ha to be completed by the end of 2023.	At the end of 2022, the cumulative rehabilitation total is 311.8ha behind the EIS forecast for the end of 2023.
Warkworth Continuation Project		
Operational Noise	Operational Noise would not further impact locations not already significantly impacted by noise from the mine. Operational Noise would significantly impact four locations (34, 77, 264 and 102 [Warkworth Hall]). The three locations are within the Acquisition by Request zone. No significant exceedances for properties in Bulga.	A significant number of noise complaints were received during the audit period and exceedances in noise levels were recorded (in 2022 only) during the audit period.
Blasting Noise and Vibration	Blasting Impacts would not increase (over those predicted in the original EIS).	A significant number of blast complaints were received during the audit period, however the impacts were generally in line with the EIS predictions.
Air Quality	No significant air quality (dust) impacts were predicted at any residences other than twenty-four mine owned properties and two privately owned residences (77 and 264) that may experience dust levels above the relevant criteria for 24hr and annual average PM ₁₀ . No impacts from Blast Fume were predicted.	A significant number of dust complaints were received during the audit period and no exceedances of dust criteria recorded.
Ecology	The vegetation and habitats would be cleared as part of the continuation project. The offset strategy and on-site rehabilitation would involve the establishment of 1008 Ha of native vegetation.	There was no unapproved clearing of any areas during the audit period. However progressive rehabilitation has not met the targets set in the MOP (Rehabilitation Management Plan).

Category	Predicted Impact	Actual Impact
	Existing biodiversity credits would be retired.	
Visual Amenity	The visual impacts of the operation would be moderate to low and include the overburden placement areas. Progressive rehabilitation would mitigate the visual impacts of the development.	General visual impacts are consistent with predictions in the EIS, however lighting impacts associated with mobile plant has resulted in a significant number of complaints from local residents.
Groundwater	Groundwater levels are significantly impacted by the mining operations and groundwater flows towards the open cut pits. Groundwater impacts are considered to be manageable.	Groundwater impacts are in line with EIS predictions.
Surface Water	The operations were predicted to have no significant impact on surface water of adjacent water features (ie off-site).	There have been unapproved surface water discharges during the audit period, however no indications that water impacts exceed those predicted in the EIS.
Aboriginal Cultural Heritage	No unapproved impacts on aboriginal cultural heritage were predicted.	No unapproved impacts on aboriginal cultural heritage were recorded.
Historic Heritage	No unapproved impacts on historic (built) heritage were predicted.	No unapproved impacts on historic (built) heritage were recorded.
Traffic and Transport	No significant (increased) impacts on local roads were predicted.	No significant impacts on local roads were identified.
Rehabilitation	Progressive rehabilitation commitments are outlined in the Warkworth Continuation 2014 and Mt Thorley Operations 2014 EIS. These documents modelled a total of 1,103 ha of rehabilitation to be completed by end of 2017, and a further 504.8ha to be completed by the end of 2023.	At the end of 2022, the cumulative rehabilitation total is 311.8ha behind the EIS forecast for the end of 2023.

7.9 Other Matters

As part of the preparation of the scope for this audit, DPE approved the audit team in their letter to MTW titled "Warkworth Continuation - Auditor Endorsement Request (SSD-6464 and SSD-6465)", dated 29 March 2023. In that letter DPE did not identify any specific environmental or compliance issues to be addressed.

The Auditor did not identify any further issues in relation to environment (statutory compliance) or the management and mitigation of environmental hazards.

Compliance Table SSD 6464 Warkworth Mining

Appendix A1

Project Approval SSD 6464 Warkworth Continuation Project (Mod 2)								
Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
S2 C1	Obligation to Minimise Harm to the Environment	In addition to meeting the specific performance criteria established under this consent, the Applicant must implement all reasonable and feasible measures to prevent and/or minimise any material harm to the environment that may result from the construction, operation, or rehabilitation of the development.	Documents as noted below			Although there have been incidents and non-compliances with the conditions of approval, it was observed during the site inspection and through interviews and site observations made during the audit that the measures implemented on site were reasonable and feasible with appropriate corrective actions implemented in the event of incidents and non-compliances.	Complies	
S2 C2	Terms of Consent	The Applicant must carry out the development: <ul style="list-style-type: none"> a. generally, in accordance with the EIS and Modification Report (MOD 2); and 				Based on the observations made during the site inspection, review of management plans, monitoring data and other records, it may be reasonably concluded that the Development is being undertaken generally in accordance with the EIS and Modification Report (MOD 2). An appropriate level of resourcing has been applied to manage compliance with the Development Consent	Complies	
		<ul style="list-style-type: none"> b. in accordance with the conditions of this consent 				There have been some instances where the condition of this consent has not been complied with, therefore compliance with this condition has not been achieved. Refer to individual conditions below.	Noted	
S2 C3	Terms of Consent	If there is any inconsistency between the above documents, the most recent document must prevail to the extent of the inconsistency. However, the conditions of this approval must prevail to the extent of any inconsistency.					Noted	
S2 C4	Terms of Consent	The Applicant must comply with any reasonable requirement/s of the Planning Secretary arising from: <ul style="list-style-type: none"> a) any reports, strategies, plans, programs, reviews, audits or correspondence that are submitted in accordance with this consent; 	Letter from Yancoal (G. Mulhearn) to DPE (A Hagerthy) titled "Warkworth Mining Limited (SSD 64-64)- Blast Event (N39-BF8-MD1). DPE Ref SSD- 6464-PA-37", dated 3 March 2022 Letter from DPE (H. Watters) to Yancoal (G. Mulhearn) titled "Warkworth Continuation (SSD-6464)- Blast Exceedance 24 February 2022			DPE directed Yancoal to update and resubmit the Blast Management Plan to review following their review of the blasting incident report submitted to the Department on the 3 March 2022. The revised BMP was submitted to DPE on the 20 th of January 2022 and approved on the 24 th of March 2023	Complies	
		<ul style="list-style-type: none"> b) any reports, reviews or audits commissioned by the Department regarding compliance that are submitted in accordance with this consent; 		Environment and Community Manager – no reports, reviews or audits were commissioned by the Department		No reports, reviews or audits were commissioned by the Department	Not triggered	
		<ul style="list-style-type: none"> c) the implementation of any actions or measures contained in these documents. 				The Auditor has reviewed correspondence between MTW and DPE and found that MTW has responded to directions issued by DPE during this audit period	Complies	
S2 C5	Limits on Consent Mining Operations	The Applicant may carry out mining operations on site for 21 years from the date of commencement of development under this consent	Noted				Noted	

Project Approval SSD 6464 Warkworth Continuation Project (Mod 2)								
Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
S2 C6	Coal Extraction	The Applicant must not extract more than 18 million tonnes of ROM coal from the Mt Warkworth mine in a calendar year.	Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023		Photograph 1 – Warkworth Open Cut Mine	Table 4.1 of each Annual Review documents the following tonnages of ROM coal extracted: <ul style="list-style-type: none"> 2020 – 16.6 2021 – 16.08 2022 – 12.41 The recorded tonnages are less than the maximum tonnage prescribed by this condition.	Complies	
S2 C7	Coal Transport	The Applicant Must: <ul style="list-style-type: none"> a) not transport any coal produced at the development by public road; and 	Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023		No coal was observed to be exported transported on public roads from the site during the audit inspection.	The coal transportation records indicate that coal is only transferred from the site by Rail.	Complies	
		<ul style="list-style-type: none"> b) ensure that the coal produced on site is only sent to Mt Thorley Coal Loader for transport by rail to export and/or domestic markets 	Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023		No coal was observed to be exported from the site during the audit inspection. All coal was transported internally by truck to the Coal Loader for export by train	The coal transportation records indicate that coal is only transferred from the site by Rail.	Complies	
S2 C8	Commencement of Development Under This Consent	The Applicant must: <ul style="list-style-type: none"> a) notify the Planning Secretary in writing of the date of commencement of development under this consent; and 	MTW Independent Environmental Audit 2017 Independent Audit Report Jacobs, 8 th of August 2018		Assessed as compliant during the 2017 audit. 2017 Auditor sighted Letter dated, commencement date 15 th February 15 th February 2016		Complies	
		<ul style="list-style-type: none"> b) may only commence development under this consent once the Planning Secretary has agreed in writing that all prerequisites to the commencement of development under this consent have been met. 	MTW Independent Environmental Audit 2017 Independent Audit Report Jacobs, 8 th of August 2018		Assessed as compliant during the 2017 audit. DPE letter dated 8 th February 2016 notifying MTW that all required documentation was in place.		Complies	
S2 C9	Surrender of Existing Development Consent	By the end of January 2017, unless the Planning Secretary agrees otherwise, the Applicant must surrender the existing development consent (DA-300-9-2002-i) for the Warkworth mine in accordance with Section 104A of the EP&A Act. Following the commencement of development under this consent, the conditions of this consent shall prevail to the extent of any inconsistency with the conditions of DA-300-9-2002-i.	Letter from Yancoal (G. Mulhearn) to DPE (H. Reed) titled “Development Consent” Warkworth Mining Limited” dated 4 June 2019 Letter from DPE (H Reed) to Yancoal (G. Mulhearn) dated 13 June 2019 Letter from DPE (M Sprott) to Yancoal (G. Mulhearn) titled “Surrender of Warkworth Development Consent (DA 300-9-20020i) dated 2 July 2021			Reported as non-compliant in the 2020 Annual Review. No documentation was available to the auditor that confirmed that the existing consents had been surrendered.	Non-compliant	Work with DPE is close out the surrender of the development consents.
S2 C10	Structure Adequacy	The Applicant must 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 and SA NSW.	Acrocert Construction Certificate – Notice of Determination number 2022-0781 dated 30 November 2022 (In Pit Offices) Acrocert Complying Development – Notice of Determination number 2022-0132 dated 30 November 2022 (Communications Tower) Acrocert Construction Certificate – Notice of Determination number 2022-0534 dated 7 December 2022 (New Workshop)	Environment and Community Manager - The following facilities were constructed during this audit period: <ul style="list-style-type: none"> In Pit Offices (Construction Certificate) MTW North Workshop 		AcroCert have been appointed as the independent certifier have provided construction certificates and certificates of compliance for the following buildings <ul style="list-style-type: none"> In Pit Offices (Construction Certificate) MTW North Workshop Each of the Certificates notes the BCA Classification	Complies	

Project Approval SSD 6464 Warkworth Continuation Project (Mod 2)								
Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
S2 C11	Demolition	The applicant must ensure that all demolition work on site is carried out in accordance with AS 2601-2001: The Demolition of Structures, or its latest version.		Environment and Community Manager – no demolition works were undertaken during the audit period.		No demolition works were undertaken during the audit period.	Not Triggered	
S2 C12	Protection of Public Infrastructure	Unless the Applicant and the applicable authority agree otherwise, the Applicant must:		Environment and Community Manager – no damage to public road associated with any MTW works occurred during the audit period.		No damage to public road associated with any MTW works occurred during the audit period.	Not Triggered	
		a) repair, or pay the full costs associated with repairing, any public infrastructure that is damaged by the development; and		Environment and Community Manager – no damage to public road associated with any MTW works occurred during the audit period.		No damage to public road associated with any MTW works occurred during the audit period.	Not Triggered	
S2 C12	Protection of Public Infrastructure	b) relocate, or pay the full costs associated with relocating, any public infrastructure that needs to be relocated as a result of the development.		Environment and Community Manager – no damage to public road associated with any MTW works occurred during the audit period.		No damage to public road associated with any MTW works occurred during the audit period.	Not Triggered	
S2 C13	Operation of Plant and Equipment	The Applicant must ensure that all plant and equipment used on site, or to monitor the performance of the development, is maintained and operated in a proper and efficient manner	Plant and Equipment maintenance records.	Maintenance Manager demonstrated the operation of the mine Maintenance Management System. The system provides a framework for the management of routine maintenance and the identification and rectification of plant and equipment issues.	Designated equipment maintenance areas were inspected. Complex management systems and equipment are implemented to plan and record routine servicing and unplanned maintenance for items of plant, including coal trucks, drill rigs etc.	Designated equipment maintenance areas were inspected. Complex management systems and equipment are implemented to plan and record routine servicing and unplanned maintenance for items of plant, including coal trucks, drill rigs etc. The maintenance management system implemented at the mine are designed to ensure the efficient operation of plant and equipment were comprehensive	Complies	
S2 C14	Updating & Staging of Strategies, Plans and Programs	With the approval of the Planning Secretary, the Applicant may:		Environment and Community Manager – MTW submits management plans as required during the audit period.			Noted	
		a) submit any strategy, plan or program required by this consent on a progressive basis; and		Environment and Community Manager – MTW submits management plans as required during the audit period.			Noted	
		b) combine any strategy, plan or program required by this consent with any similar strategy, plan or program required for the Mt Thorley mine.		Environment and Community Manager – MTW submits management plans as required during the audit period.				
		To ensure these strategies, plans or programs are updated on a regular basis, the Applicant may at any time submit revised strategies, plans or programs to the Planning Secretary for approval. With the agreement of the Planning Secretary, the Applicant may prepare any revised strategy, plan or program without undertaking consultation with all parties under the applicable condition of this consent.	Letter from DPE (J. Fittell) to Warkworth Mining Limited (G Mulhearn) titled "Approval of Warkworth Continuation Project Blast Management Plan" dated 24 March 2023			During the audit period, a number of management plans were reviewed and updated, including (but not limited to) the Environmental Strategy, Noise Management Plan and the various biodiversity management plans. In their letter of approval for the Blast Management Plan dated 24 March 2023,, DPE agreed that in accordance with Condition 14 of Schedule 2, that consultation with each of the relevant parties listed in Condition 16 of Schedule 3 is not required given the administrative updates.	Complies	

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Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
S2 C15	Community Enhancement Program	Within 6 months of the date of this consent, unless the Planning Secretary agrees otherwise, the Applicant must enter into a VPA with Council in accordance with:	Independent Environmental Audit Report for Yancoal Mt Thorley Warkworth, Hansen Bailey, July 2020			Assessed as compliant by the 2020 audit.	Complies	
		a) Division 6 of Part 4 of the EP&A Act; and	Agenda, Mt Thorley Warkworth Voluntary Planning Agreement Community Meeting, 1 June 2023			Assessed as compliant by the 2020 audit	Complies	
		b) the terms of Applicant's offer in its letter to the Department dated 4 May 2015	Minutes, Mt Thorley Warkworth Voluntary Planning Agreement Community Meeting, 9 February 2023			Assessed as compliant by the 2020 audit	Complies	
		The VPA must include provisions for the payment, collections, management and distribution of the contributions under the agreement, with a focus on funding community infrastructure and services in the area surrounding, including Bulga Village.	Agenda, Mt Thorley Warkworth Voluntary Planning Agreement Community Meeting, 9 February 2023 Minutes, Mt Thorley Warkworth Voluntary Planning Agreement Community Meeting, 3 November 2022			Assessed as compliant by the 2020 audit Implementation of the VPA is ongoing, a committee has been established which includes Singleton Council, minutes are kept of meetings with financial documents providing a record of contributions.	Complies	
	<i>Note: The Applicant's offer comprises a total contribution of \$11 million over 21 years for both the development and the Warkworth Continuation Project (SSD-6464).</i>	VPA: Warkworth and Mt Thorley Continuation Prohects, financial statement as at 31 December 2022						
S3 C1	Acquisition on Request	Upon receiving a written request for acquisition from the owner of the land listed in Table 1, the Applicant shall acquire the land in accordance with the procedures in conditions 5 and 6 of schedule 4.		Environment and Community Manager- Zero acquisitions have occurred during the audit period		No acquisitions have occurred during the audit period	Not Triggered	
	Table 1	Acquisition Basis	Land					
		Noise and Air	77, 102, D, E, F					
		Noise	34, 81, 148, 150, 190, 192, J					
Air	A, B							
S3 C2	Acquisition on Request	The applicant is only required to acquire property 77 if the owner no longer has voluntary land acquisition rights under the planning approvals for Wambo mine or its associated rail facilities.		Environment and Community Manager- Zero acquisitions have occurred during the audit period		No acquisitions have occurred during the audit period	Not Triggered	
S3 C3	Additional Mitigation on Request	Upon receiving a written request from the owner of any residence on the land listed in Table 1 or Table 2, the Applicant must implement additional noise and /or air quality mitigation measures at or in the vicinity of the residence in consultation with the landowner. These measures must be consistent with the measures outlined in the Voluntary Land Acquisition and Mitigation Policy. They must also be reasonable and feasible and proportionate with the level of predicted impact.	Letter from Gorton Law (K Gorton) to Yancoal (G Mulhearn) titled "258 The Inlet Road, Bulga Noise Mitigation" dated 21 February 2020 Email from Yancoal (G Mulhearn) to Gorton Law (K Gorton) titled "Noise Mitigation – 258 the Inlet Road Bulga" dated 26 March 2023" Letter from Yancoal (G.Mulhearn) to Packtron Packaging (M Kalt) titled "Mitigation on Request in respect of 258 the Inlet Road Bulga" dated 4 June 2023 Email from Yancoal (G. Mulhearn) to Packton Packaging (M Kalt) titled "258 Inlet Road Bulga Noise Mitigation" dated 31 May 2023			One mitigation request received. Packtron Packaging – ID#217 on 21/2/20. Status: -One winery building and one cabin on the property. Confirmatory development consent / occupation certificate documentation provided by owner (2020-2021), review of which buildings would be eligible for mitigation conducted. -4/6/21 – Letter provided to landowner indicating cabin is eligible for mitigation, and winery building is not a residence so is not eligible. 2021-2022 – COVID delays – paused progression on request of landowner. The landowner indicated they would be in touch when lockdown is over in Sydney. -31/5/23 – MTW got back in contact with landowner to progress mitigation.	Complies	

Project Approval SSD 6464 Warkworth Continuation Project (Mod 2)								
Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
S3 C3	Additional Mitigation on Request	If within 3 months of receiving this request from the owner, the Applicant and the Owner cannot agree in the measures to be implemented, or there is a dispute about the implementation of these measures, then either party may refer to matter to the planning secretary for resolution.	Letter from Yancoal (G.Mulhearn) to Packtron Packaging (Pty Ltd) titled "Mitigation Upon Request in Respect of 258 The Inlet Road Bulga NSW			There have not been any disputes referred to the Planning Secretary for Resolution, there have been ongoing negotiations with the property at 258 The Inlet Road, Bulga (Property 217), however these have now been resolved and Yancoal have agreed to provide mitigation.	Not Triggered	
	Table 2	Mitigation Basis	Characterisation of Impact	Land				
		Noise	Moderate	12, 14,15, 126, 128, 130, 139, 152, 183, 191, 192, 217, 262, 263				
S3 C4	Noise Criteria – Before 1 Jan 2017	Before 1 January 2017, except for the land in Table 1, the Applicant must ensure that the noise generated by the Development does not exceed the noise criteria in condition 18 of DA-300-9-2002-i.	Independent Environmental Audit Report for Yancoal Mount Thorley Warkworth, Hansen Bailey, July 2020			The condition applies to the period prior to this audit period. An assessment of compliance against this condition was provided in the IEAs of previous audit periods.	Not Triggered	
S3 C5	Noise Criteria – from 1 Ja 2017	From 1 January 2017, except for the land in Table 1, the Applicant must ensure that the noise generated by the Development does not exceed the noise criteria in Table 3 at any residence on privately owned land.	Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023	Environment and Community Manager – the downward trend in noise complaints is a reflection of the improvement in performance and community relations. <ul style="list-style-type: none"> Noise complaints from previous years 2016 (325), 2017 – 191 (171), 2019 (112) 2020 (98), 2021 (49), 2022 (47), 2023 (to end April 2023) – 11 MTW implements a noise enhancement prediction tool for planning. This and weather forecast conditions are reviewed prior to shift and MTW actively manages planned works with respect of atmospheric conditions that are present on any given night. Whilst there have been 6 exceedances of noise criteria by external attended noise monitoring in the 3-year audit period in 2022, these have occurred on only 3 nights during in the audit period. Of those nights, the incident on 5/4/22 and 15/9/22 had measured noise within the noise limits, and only exceeded due only to a low frequency penalty required to be applied. The 20/7/22 exceedance was caused by total noise, and low frequency penalty. 		Section 6.2.2/3 of each Annual Review presents the results of the noise monthly noise monitoring undertaken by independent consultants. A summary of compliance is as follows: <ul style="list-style-type: none"> 2020 – no non compliances reported 2021 - no non compliances reported 2022 – six exceedances of the noise criteria were recorded One hundred and fifty-seven (157) noise complaints were received during the audit period. This consisted of 98 complaints in 2020, 49 in 2021, 47 in 2022 and 11 in 2023 (to the end of April). While there has been an improvement over the life of the project in the number of complaints (325 recorded in 2016), a contributing factor to the higher number of complaints during the early operational stages may potentially be attributed to a higher proportion of activities closer to ground level, with improvements achieved over the project life due to attenuation provided by the pit depth, mine walls and in acoustic vehicle technology. Prior to each shift, a predictive tool is utilised to assess potential impacts and considers meteorological conditions. Following the receipt of noise complaints, a CRO is deployed to make observations and measure noise levels (5-minute sample). In many instances the CROs observations have verified the complaint and the noise readings have indicated that the noise levels from the mine were exceeding the relevant criteria. Where these potential exceedances are identified, MTW review the works being undertaken at the likely exceedance source and make changes to those works to reduce noise emissions. The Auditor understands that no noise modelling of future works that may impact sensitive receivers is not routinely undertaken.	Non-compliant	Review current predictive tools and processes against available models that are currently being utilised in both the mining and construction industries with the objective of: <ul style="list-style-type: none"> Identifying areas on site that have the potential to impact noise sensitive receivers; Provides a Noise Impact Prediction Model that can be used by MTW to plan works in those areas with the objective to proactively ensure that noise from plant and equipment does not cause annoyance to local community and exceed the relevant criteria.

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Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections		Assessment		Finding	Recommendations	
S3 C5	Table 3	Location	Land		Day (LAeq (15min))	Evening (LAeq (15min))	Night (LAeq (15min))	Night (LA1(1min))			
		Bulga	17,19		40	40	40	50			
			37, 43, 52, 62, 63, 63, 66, 71, 72, 73, 75, 82, 210, 211, 236, 252, 920		39	39	39	49			
			12, 14, 15, 16, 18, 20, 21, 22, 23, 24, 26, 28, 31, 35, 36, 38, 39, 40, 41, 42, 44, 45, 46, 47, 48, 49, 50, 53, 54, 55, 56, 57, 58, 60, 61, 67, 70, 74, 80, 84, 89, 215, 217, 229, 231, 234, 235, 237, 238, 243, 253, 254, 903, 917, 918, 919, 921, 929		38	38	38	48			
			8, 9, 225, 226, 227, 228, 230, 266, 922		37	37	37	47			
			4, 6, 7, 10, 221, 222, 223		36	36	36	46			
			All other residences on private land		35	35	35	45			
		Mibrodale	111		36	36	36	46			
			All other residences on private land								
		Warkworth	All other residences on private land								
		Maison Dieu	All other residences on private land								
		Gouldsville, Long Point	126, 262		41	41	41	51			
			128		39	39	39	49			
			130, 139		38	38	38	48			
			All other residences on private land		35	35	35	45			
		Hambledon Hill / Wyles Flat	192		40	40	40	50			
			152,191,263		39	39	39	49			
			183		38	38	38	48			
			181, 182, 184, 185, 186, 187, 937a, 937b		37	37	37	47			
			155, 156, 157, 180, 937d, 937e		36	36	36	46			
			All other residences on private land		35	35	35	45			
		Mt Thorley	144, 915		43	43	43	53			
			146		42	42	42	52			
			148, 188		36	36	36	46			
All other residences on private land			35	35	35	45					
S3 C6	Operating Conditions	The Applicant must: a) implement all reasonable and feasible measures to minimise the operational, low frequency and road noise of the development;	Noise Management Plan, Mt Thorley Warkworth, Rev 5.2 dated 8 August 2022 Thearle Engineering, Sound Power Determination, Mobile Machinery CAT D10T2 Dozer, Serial Number RAB01006 Ful Sound Kit, 25 June 2021 Thearle Engineering, Sound Power Determination, Mobile Machinery CAT D10T2 Dozer, Serial Number KSN00309 Ful Sound Kit, 25 June 2021 Caterpillar MD 6250 Unit 231, Sound Power Assessment, Westrac Pty Ltd Global Acoustics 7 May 2023 Hitachi EH5000-AC3 Mount Thorley Warkworth, Sound Power by sound pressure level assessment, Hitachi Construction Machinery (Australia) Pty Ltd, 16 April 2020		Operating mining plant was observed during the site inspection.		As observed during the site inspection several mitigation measures have been implemented on site including noise attenuation on items of plant and equipment, no reversing beepers used (non-tonal reversing alarms instead), regular service inspections and site induction. In addition, a comprehensive noise monitoring and complaints management system has been implemented.	Complies			
			b) operate a comprehensive noise management system on suite 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 consent;	Noise Management Plan, Mt Thorley Warkworth, Rev 5.2 dated 8 August 2022 Complaints Register				Environment and Community Manager- A noise enhancement report is generated each night indicating predictive noise enhancement for the coming night shift. The Community Response Officers' work instructions includes a review of the noise enhancement report.	6.3.5 of the Noise Management Plan describes the proactive noise mitigation processes implemented by MTW. "An assessment of (weather) forecast information at the commencement of each night shift identifies likely direction of meteorological enhancement of noise (if any). MTW has developed a simple noise enhancement prediction tool that uses WRF forecast data to predict source to receptor sonic gradients for the key noise propagation pathways from MTW to nearby sensitive receptors.	Complies	

Project Approval SSD 6464 Warkworth Continuation Project (Mod 2)								
Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
						Handheld noise monitoring is undertaken on a proactive basis in neighbouring communities on a night-to-night basis, as well as in response to triggers and complaints". Note however the Auditor's recommendation in S3 C3 above		
S3 C6	Operating Conditions	c) minimise the noise impacts of the development during meteorological conditions when the noise limits in this consent do not apply (see Appendix 7); and	Noise Management Plan, Mt Thorley Warkworth, Rev 5.2 dated 8 August 2022 Complaints Register	Environment and Community Manager- A noise enhancement report is generated each night indicating predictive noise enhancement for the coming night shift. The Community Response Officers' work instructions includes a review of the noise enhancement report.		6.3.5 of the Noise Management Plan describes the proactive noise mitigation processes implemented by MTW. "An assessment of (weather) forecast information at the commencement of each night shift identifies likely direction of meteorological enhancement of noise (if any). MTW has developed a simple noise enhancement prediction tool that uses WRF forecast data to predict source to receptor sonic gradients for the key noise propagation pathways from MTW to nearby sensitive receptors. Handheld noise monitoring is undertaken on a proactive basis in neighbouring communities on a night-to-night basis, as well as in response to triggers and complaints". Note however the Auditor's recommendation in S3 C3 above	Complies	
		d) ensure that; • all new trucks, dozers, drills and excavators purchased for use on the site after the date of this consent are commissioned as noise suppressed (or attenuated) units; and • the existing fleet of trucks, dozers, drills and excavators on site at the date of this approval is progressively fitted with suitable noise attenuation packages to ensure that 100% of the fleet being used on site is attenuated by the end of 2016; and	Thearle Engineering, Sound Power Determination, Mobile Machinery CAT D10T2 Dozer, Serial Number RAB01006 Ful Sound Kit, 25 June 2021 Thearle Engineering, Sound Power Determination, Mobile Machinery CAT D10T2 Dozer, Serial Number KSN00309 Ful Sound Kit, 25 June 2021 Caterpillar MD 6250 Unit 231, Sound Power Assessment, Westrac Pty Ltd Global Acoustics 7 May 202. Hitachi EH5000-AC3 Mount Thorley Warkworth, Sound Power by sound pressure level assessment, Hitachi Construction Machinery (Australia) Pty Ltd, 16 April 2020.	Environment and Community Manager – All HME was fitted with noise attenuation by the end of 2016	Examples of noise attenuation on items of plant and equipment were observed during the site inspection	The Auditor sighted records (and observed sound attenuated plant) that verified proactive noise attenuation of plant and equipment is being undertaken.	Complies	
		e) carry out regular monitoring to determine whether the development is complying with the relevant conditions of this consent and, if necessary, adjust the scale of operations on site to meet the criteria in this consent	Yancoal internal environmental monitoring and reporting system: Insite Yancoal Australia			A comprehensive network of noise monitors has been established with monitoring results reported on the MTW website (Insite). The website provides details of any operational changes made due to excessive noise.	Complies	

Project Approval SSD 6464 Warkworth Continuation Project (Mod 2)								
Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
S3 C7	Noise Management Plan	The Applicant must prepare a Noise Management Plan for the development to the satisfaction of the Planning Secretary and carry out the development in accordance with this plan. The plan must:	Noise Management Plan, Mt Thorley Warkworth, Rev 5.2 dated 8 August 2022 Letter from DPE (J. Fittell) to Warkworth Mining Limited (G Mulhearn) titled "Noise Management Plan for Mt Thorley Continuation Project (SSD 6465) and Warkworth Continuation Project (SSD 6464)" dated 8 August 2022.			During the audit period, the NMP was updated with version 5.2 of the NMP approved on the 8 th of August 2022. 2022 Annual Review prepared by MTW reported a non-compliance against this condition due to exceedances of noise criteria during that audit period. However, it is noted that this should have been recorded against condition S3 C5.	Complies	
		a) be prepared in consultation with the EPA, and submitted to the Planning Secretary for approval prior to the commencement of any development under this consent;	Letter from Yancoal (G. Mulhearn) to EPA (N Ryan) titled "Yancoal, Mt Thorley Warkworth EPA Consultation on Noise, Air Quality Blasting and Water Management Plans" dated 18 July 2018 Letter from EPA (N Ryan) to Yancoal (G Mulhearn) titled Environment Protection Licences 1376 and 1976 Environmental Management Plans" dated 19 July 2018 Independent Environmental Audit Report for Yancoal Mount Thorley Warkworth, Hansen Bailey, July 2020			The noise management plan was issued to EPA on 18 th July 2018 for consultation. The EPA did not provide any comments, noting it is not their role to review such plans. Appendix C of the NMP includes the correspondence with the EPA. 2020 Audit viewed the Secretary's Approval of the Plan dated 28 August 2018	Complies	
		b) describe the measures that would be implemented to ensure compliance with the relevant noise criteria and operating conditions of this consent;	Noise Management Plan, Mt Thorley Warkworth, Rev 5.2 dated 8 August 2022			Section 6 of the NMP	Complies	
		c) describe the proposed noise management system in detail;	Noise Management Plan, Mt Thorley Warkworth, Rev 5.2 dated 8 August 2022			Section 8.1.3 of the NMP	Complies	
		d) include provisions for keeping the local community informed about the operation of the noise management system and monitoring programs (including any correction factors under the NSW Industrial Noise Policy), including regular briefings and a public information session within 6 months of granting this development consent;	Noise Management Plan, Mt Thorley Warkworth, Rev 5.2 dated 8 August 2022			Appendix A of the NMP	Complies	
		e) include a noise monitoring program that: •evaluates and reports on: - the effectiveness of the noise management system and the the noise attenuation program (see condition 6(d)); - compliance against the noise criteria in this consent; and noise operating conditions; • includes a program to calibrate and validate the real-time noise monitoring results with the attended monitoring results over time (so the real-time monitoring program can be used as a trigger for further attended monitoring where there is a risk of non-compliance with the Noise criteria in this consent); and • defines what constitutes a noise incident and includes a protocol for identifying and notifying the Department and relevant stakeholders of any noise incidents.	Noise Management Plan, Mt Thorley Warkworth, Rev 5.2 dated 8 August 2022			Appendix A of the NMP	Complies	

Project Approval SSD 6464 Warkworth Continuation Project (Mod 2)									
Cond.	Title	Condition	Documents Reviewed		Interviews	Audit Inspections	Assessment	Finding	Recommendations
S3 C8	Blasting Criteria	The Applicant must ensure that the blasting on the site does not cause exceedances of the criteria in Table 4. These criteria do not apply if the Applicant has a written agreement with the relevant owner.	Year to Date Blasting Records – 2020 Year to Date Blasting Records – 2021 Year to Date Blasting Records – 2022 Year to Date Blasting Records – 2023				The 2022 Annual Return reported that blast event n39-bfb-md1 & n39-bfb-ps1c produced an air blast overpressure of 125.5 dB received at the Warkworth monitoring station (EPA Point 4). The blast was investigated, and it was determined that the overpressure reading did not occur at a residential property, therefore the incident is not considered to be a non-compliance.	Complies	
	Table 4	Location	Airblast overpressure dB (LinPeak)	Ground Vibration (mm/s)	Allowable Exceedance				
		Residence on Privately owned land	120	10	0%				
			115	5	5% of total number of blasts over 12 months				
S3 C9	Blasting Hours	The Applicant must only carry out blasting on site between 7am and 5pm Monday to Saturday inclusive. No blasting is allowed on Sundays, public holidays, or at any other time without the written approval of the Planning Secretary.	Year to Date Blasting Records – 2020 Year to Date Blasting Records – 2021 Year to Date Blasting Records – 2022 Year to Date Blasting Records – 2023		Environment and Community Manager – all blasts occurred within permitted times		The detailed records show the time and dates for each blast. Samples of the blasting data confirms compliance.	Complies	
S3 C10	Blasting Frequency	The Applicant may carry out a maximum of: a) 3 blasts a day; and	Year to Date Blasting Records – 2020 Year to Date Blasting Records – 2021 Year to Date Blasting Records – 2022 Year to Date Blasting Records – 2023				The records maintained demonstrate that a maximum of two blasts have been made the site.	Complies	
		b) 12 blasts a week, averaged over a calendar year, at the site.	Year to Date Blasting Records – 2020 Year to Date Blasting Records – 2021 Year to Date Blasting Records – 2022 Year to Date Blasting Records – 2023				The number of blasts undertaken for each year are as follows: <ul style="list-style-type: none"> 2020 – 208, – max 4 per week (WML) 2021 - 224– max 4.3 per week WML) 2022 - 205 – max 0.3 per week 2023 – 64 blasts to the end of April, max 4 per week 	Complies	
	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, blasts misfires or blasts required to ensure the safety of the mine, its workers or the general public.							Noted	
S3 C11	Blasting Frequency	The Applicant must not carry out more than 1 blast a day within 500 metres of the Putty Road/ and or Golden Highway.			Environment and Community Manager – All blasts within 500m of Putty Rd / or Golden Highway require a road closure for the blast exclusion zone.		Blast exclusion maps 2020-2023 showing 300-500m exclusion zone. This identifies features that need management including public road closures, and infrastructure within 500m exclusion zone. -Weekly blast schedules – shows the likely road closures required for upcoming week. A sample of blast exclusion maps and weekly exclusion maps was reviewed that confirmed compliance with this requirement.	Complies	
S3 C12	Property Inspections	If the Applicant receives a written request from the owner of any privately-owned land within 2 kilometres of the approved open cut mining pit/s on site for a property inspection to establish the baseline condition of any buildings and/or structures on his/her land, or to have a previous property inspection updated, then within 2 months of receiving this request the Applicant must:			Environment and Community Manager- Nil baseline property inspections requested during the audit period		Not triggered, no baseline property inspections were triggered during the audit period.	Not Triggered	

Project Approval SSD 6464 Warkworth Continuation Project (Mod 2)								
Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
S3 C12	Property Inspections	a) Commission a suitably qualified, experienced and independent person, whose appointment is acceptable to both parties to: <ul style="list-style-type: none"> establish the baseline condition of any buildings and other structures on the land, or update the previous property inspection report; and identify measures that should be implemented to minimise the potential blasting impacts of the project on these buildings and/or structures; and 		Environment and Community Manager- Nil baseline property inspections requested during the audit period		Not triggered, no baseline property inspections were triggered during the audit period.	Not triggered	
		b) give the landowner a copy of the new or updated property inspection report.		Environment and Community Manager- Nil baseline property inspections requested during the audit period		Not triggered, no baseline property inspections were triggered during the audit period.	Not triggered	
		c) If there is a dispute over the selection of the suitably qualified, experienced and independent person, or the Applicant or the landowner disagrees with the findings of the property inspection report, either party may refer to the Planning Secretary for resolution.	Email from DPE (A Hegarty) to Property Owner (263 Wambo Road Bulga title "referral to Secretary for Resolution of blast property investigation -263 Wambo Road dated 6 May Letter from DPE (H Watters) to Yancoal G Mulhearn titled " Mount Thorley, Warkworth Complex - SSD 6464 and SSD 6465 Property Investigation - Blasting dated "10 November 2021. Letter from DPE (A Hegarty) to Property Owner (263 Wambo Road Bulga title "Mount Thorley, Warkworth Complex - SSD 6464 and SSD 6465 Property Investigation - Blasting dated "21 March 2022 Letter from Bill Jordan and Associates titled "Residence at 263 Wambo Road Bulga, Assessment of possible blast vibration – addendum report dated 7 February 2022	Environment and Community Manager- Nil disputes with property owners have occurred during the audit period		One referral was made to the Planning Secretary during the audit period. An investigation was initiated by the Planning Secretary which required the preparation of an addendum report (to the original property condition inspection report) as well as the provision of vibration monitoring data. DPE wrote to the concerned property owner addressed the property owners concerns and concluded the 2019 report and addendum report were still valid and no further property investigations are required for blasting undertaken prior to 29 June 2019.	Not triggered	
S3 C13	Property investigations	If the owner of any privately-owned land claims that buildings and/or structures on his/her land have been damaged as a result of blasting on the site, then within 2 months of receiving this claim the Applicant must:		Environment and Community Manager- Nil new claims have been made during the audit period		No new claims have been made during the audit period	Not triggered	
		a) commission a suitably qualified, experienced and independent person, whose appointment is acceptable to both parties to investigate the claim; and		Environment and Community Manager- Nil new claims have been made during the audit period		No new claims have been made during the audit period	Not triggered	
		b) give the landowner a copy of the property investigation report.		Environment and Community Manager- Nil new claims have been made during the audit period		No new claims have been made during the audit period	Not triggered	
		c) If this independent property investigation confirms the landowner's claim, and both parties agree with these findings, then the Applicant must repair the damage to the satisfaction of the Planning Secretary. If there is a dispute over the selection of the suitably qualified, experienced and independent person, or the Applicant or the landowner disagrees with the findings of the independent property investigation, then either party may refer the matter to the Planning Secretary for resolution		Environment and Community Manager - there was one Secretary referral for a 2019 property investigation (Maizey property) this was determined to be for the same 2019 property investigation damage claim. This led to a Secretary referral for the previous 2019 claim. DPE letter to Maizey with outcome of referral provided 21 March 2022 which agreed with the findings of the original property investigation report from 2019.			Not triggered	

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Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
S3 C14	Operating Conditions Blasting	<p>During mining operations on site, the Applicant must:</p> <p>a) implement all reasonable and feasible measures 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; and • minimise the dust and fume emissions of any blasting; 	<p>Complaints Register Incident Register</p>	<p>Environment and Community Manager- Nil blast related incidents during the audit period</p>		<p>One hundred and sixty-two blast related complaints were received during the audit period. A review of the detailed complaints register indicated that those complaints were associated with blast noise and/or vibration, however no property damage was reported. One blasting incident was recorded during the audit period. No evidence of personal injuries or property damage were recorded during this audit period.</p>	Complies	
		<p>b) Ensure that blasting on the site does not damage historic heritage sites outside of the disturbance area including the Wambo Homestead, Bulga Bridge, St Phillips Church or the followings Aboriginal grinding groove sites:</p> <ul style="list-style-type: none"> • MTW-266-WSW-09-22; • MTW-267-WSW-09-22; • MTW-268-WSW-209-23; ad • Aboriginal grinding groove site Mt Thorley M 37-6-0162 (prior to its relocation). 	<p>Complaints Register Incident Register</p>	<p>Environment and Community Manager- Nil known damage during the audit period, noting that grinding groove M was relocated to avoid impact</p>		<p>One hundred and sixty-two blast related complaints were received during the audit period. A review of the detailed complaints register indicated that those complaints were associated with blast noise and/or vibration, however no property damage was reported. One blasting incident was recorded during the audit period. No evidence of personal injuries or property damage were recorded during this audit period.</p>	Complies	
		<p>c) minimise the frequency and duration of any road closures, and</p>	<p>Mount Thorley, Warkworth – Road Closure Checklist dated 18 April 2023 Mount Thorley, Warkworth – Road Closure Checklist dated 28 April 2023</p>	<p>Environment and Community Manager- the road closure record is a form kept by the road closure supervisor. The road closure form includes the start and stop time of the actual road closure. The Blast Weekly Schedule provides a forecast for the following week where a road closure may be required for the upcoming blasts. Sometimes road closures may be planned, but not enacted due to weather conditions for example.</p>		<p>Road closures are planned and managed, with a checklist kept of road closure activities.</p>	Noted	
		<p>d) operate a suitable system (including a hotline and website updates) to enable the public to get up-to-date information on the proposed blasting schedule on site.</p>	<p>Blast Management Plan, Mount Thorley Warkworth, Revision 5.2 dated 10/2/2023. MTW Website</p>			<p>Section 5.2.4 of the Blast Management Plan describes the process for public notification of the blasting schedule and includes the operation of a telephone update line and information posted on the MTW website.</p>	Complies	

Project Approval SSD 6464 Warkworth Continuation Project (Mod 2)								
Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
S3 C15	Operating Conditions Blasting	The Applicant must not undertake blasting on site within 500 metres of: (a) any public road; or (b) any land outside the site that is not owned by the Applicant, unless: • the Applicant has a written agreement with the applicable infrastructure authority or landowner to allow blasting to be carried out closer to the infrastructure or land, and the Applicant has advised the Department in writing of the terms of this agreement; or • the Applicant has: - demonstrated to the satisfaction of the Planning Secretary that the blasting can be carried out closer to the infrastructure or land without compromising the safety of people or livestock, or damaging buildings and/or structures; and - updated the Blast Management Plan to include the specific measures that would be implemented while blasting is being carried out within 500 metres of the road or land.	Blast Management Plan, Mount Thorley Warkworth, Revision 5.2 dated 10/2/2023	Environment and Community Manager - blasts have been conducted within 500m of Public Road from time to time during the audit period. Road closures are enacted in accordance with the Road Closure Management Plan. -At NOOP, blasts are conducted within 500m of infrastructure (Public Road (Golden Hwy), Ausgrid transmission lines). NOOP blast impact monitoring plan also undertaken and recorded. -Crown Land – MTW holds the grazing licence for this lot within 500m of WML		BMP includes approvals for road closures on the Council or TfNSW owned roads surrounding the mine in the BMP Appendix – Road Closure Management Plan.	Complies	
S3 C16	Blast Management Plan	The Applicant must prepare a Blast Management Plan for the development to the satisfaction of the Planning Secretary and carry out the development in accordance with this plan. This plan must:	Blast Management Plan, Mount Thorley Warkworth, Revision 5.2 dated 10/2/2023 Letter from Yancoal (G. Mulhearn) to EPA (N Ryan) titled “Yancoal, Mt Thorley Warkworth EPA Consultation on Noise, Air Quality Blasting and Water Management Plan” dated 18 July 2018				Complies	
		a) be prepared in consultation with the EPA, and submitted to the Planning Secretary for approval prior to carrying out any development under this consent;	Letter from EPA (N Ryan) to Yancoal (G Mulhearn) titled Environment Protection Licences 1376 and 1976 Environmental Management Plans” dated 19 July 2018 Independent Environmental Audit Report for Yancoal Mount Thorley Warkworth, Hansen Bailey, July 2020 Letter from DPE (J. Fittell) to Warkworth Mining Limited (G Mulhearn) titled “Approval of Warkworth Continuation Project Blast Management Plan” dated 24 March 2023			The blast management plan was updated during the audit period (administrative updates and approved on the 24 March 2023. DPE noted in their approval that consultation with the relevant parties (as detailed in this condition) was not required due to the administrative nature of the updates	Complies	
		b) describe the measures that would be implemented to ensure compliance with the blasting criteria and operating conditions of this consent;	Blast Management Plan, Mount Thorley Warkworth, Revision 5.2 dated 10/2/2023			Appendix D of the BMP	Complies	
		c) include a road closure management plan for blasting within 500 metres of a public road, that has been prepared in consultation with the RMS and Council;	Blast Management Plan, Mount Thorley Warkworth, Revision 5.2 dated 10/2/2023			Appendix D of the BMP	Complies	
		d) include a monitoring program for evaluating the performance of the development, including: • compliance with the applicable criteria; • avoiding any blasting impacts on the historic heritage items referred to in condition 12 above; and • minimising the fume emissions from the site.	Blast Management Plan, Mount Thorley Warkworth, Revision 5.2 dated 10/2/2023			Appendix E of the BMP	Complies	

Project Approval SSD 6464 Warkworth Continuation Project (Mod 2)									
Cond.	Title	Condition	Documents Reviewed		Interviews	Audit Inspections	Assessment	Finding	Recommendations
S3 C17	Air Quality Impact Assessment Criteria	Except for the land in Table 1, the Applicant must ensure that all reasonable and feasible avoidance and mitigation measures are employed so that particulate matter emissions generated by the development do not cause exceedances of the criteria listed in Tables, 5 6, and 7 at any residence on privately owned land.	Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023			Measures to minimise dust observed on site included the operation of water carts (Photograph 2), designated haul roads, rehabilitation of exposed areas (to provide ground cover and minimise dust generation), air monitoring, weather monitoring and stoppage of work (as reported in Annual Reviews) during unfavorable meteorological conditions	The Auditor's observations during the site inspection verified that the AQMP was being implemented. The 2021 Annual Review reported compliance with all short term and annual average air quality criteria. A total of 1,526 hours of mine stoppage was recorded following implementation of proactive and reactive measures to minimise dust and ensure compliance with air quality criteria. The 2021 Annual Review reported compliance with all short term and annual average air quality criteria. A total of 1,459 hours of mine stoppage was recorded following implementation of proactive and reactive measures to minimise dust and ensure compliance with air quality criteria. The 2022 Annual Review reported compliance with all short term and annual average air quality criteria with a total of 866 hours of mine stoppage recorded following pro-active and re-active measures to minimise dust and ensure air quality criteria.	Complies	
	Table 5	Pollutant	Averaging Period	Criterion					
		Total Suspended Solids (TSP) matter	Annual	90 ug/m ³					
		Particulate matter < 10um (PM ₁₀)	Annual	30 ug/m ³					
	Table 6	Pollutant	Averaging Period	Criterion					
Particulate matter < 10um (PM ₁₀)		24 Hour	50 ug/m ³						
Table 7	Pollutant	Annual	Max Increase	Max Total Dust Deposited					
	Deposited Dust		2 g/m2/month	4 g/m2/month					
S3 C18	Mine Owned Land	The Applicant must ensure that all reasonable and feasible avoidance and mitigation measures are employed so that particulate matter emissions generated by the development do not cause exceedances of the criteria listed in Tables 5, 6 and 7 at any occupied residence on mine-owned land (including land owned by another mining or petroleum company, unless and to the extent that:	Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023 Air Quality Management Plan, Mt Thorley Warkworth, Rev 4.1 dated 28 July 2022 Details (including relevant correspondence refer to parts a to d below) of any new tenants to mine owned land during this audit period.			Measures to minimise dust observed on site included the operation of water carts, designated haul roads, rehabilitation of exposed areas (to provide ground cover and minimise dust generation), air monitoring, weather monitoring and stoppage of work (as reported in Annual Reviews) during	The 2021 Annual Review reported compliance with all short term and annual average air quality criteria. A total of 1,526 hours of mine stoppage was recorded following implementation of proactive and reactive measures to minimise dust and ensure compliance with air quality criteria. The 2021 Annual Review reported compliance with all short term and annual average air quality criteria. A total of 1,459 hours of mine stoppage was recorded following implementation of proactive and reactive measures to minimise dust and ensure compliance with air quality criteria. The 2022 Annual Review reported compliance with all short term and annual average air quality criteria with a total of 866 hours of mine stoppage recorded following pro-active and re-active measures to minimise dust and ensure air quality criteria.	Complies	
S3 C18	Mine Owned Land	a) the tenant and landowner by another mining or petroleum company) have been notified of any health risks associated with such exceedances in accordance with the notification requirements under schedule 4 of this consent;	Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023				No exceedances of dust criteria were reported during the audit period.	Not Triggered	

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Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
S3 C18	Mine Owned Land	b) the tenant of any land owned by the Applicant can terminate their tenancy agreement without penalty at any time, subject to giving reasonable notice and cause;		Environment and Community Manager – no tenants terminated their leases during the audit period.		Residential tenancy agreements provide details of early termination without penalty (Clause 18).	Not Triggered	
		c) air quality monitoring is regularly undertaken to inform the tenant or landowner (if the residence is owned by another mining or gas company) of the particulate emissions at the residence; and	Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023			No exceedances of dust criteria were reported during the audit period.	Not Triggered	
		d) data from this monitoring is presented to the tenant and landowner in an appropriate format for a medical practitioner to assist the tenant and landowner in making informed decisions on the health risks associated with occupying the property.	Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023			No exceedances of dust criteria were reported during the audit period.	Not Triggered	
S3 C19	Operating Conditions Air Quality	The Applicant must: a) implement all reasonable and feasible measures to minimise the: • odour, fume and dust emissions of the development; and • release of greenhouse gas emissions from the development;	Air Quality Management Plan, Mt Thorley Warkworth, Rev 4.1 dated 28 July 2022 Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023		During the site inspection, the Auditor observed water carts in operation. The auditor observed that minor levels of dust were being generated within the open cut, on haul roads, and in areas that were being stripped, although no evidence that dust was leaving the site at the time of the site inspection. Areas of the site have been cleared and progressive rehabilitation works are behind schedule. The Auditor also observed significant areas, that while not ready for final rehabilitation, would benefit from temporary stabilisation to help reduce dust emissions during adverse wind conditions.	Fifty-eight dust-related complaints were received during the audit period. No exceedances in dust criteria were reported during the audit period. Areas of the site are being cleared in preparation for mining, and the disposal of overburden is progressing. The planned progressive rehabilitation works are, however, behind schedule. The Auditor also observed areas, that while not ready for final rehabilitation, would benefit from temporary stabilisation to help reduce dust emissions during adverse wind conditions.	Non-compliant	Increase the rate of progressive rehabilitation works with the objective of meeting the established progressive rehabilitation targets. Prepare and implement a program for the stabilisation of unsealed / disturbed areas of the site including stockpiles, finished landforms, and disturbed areas that are not currently being actively worked / filled). The program should identify and classify all areas of the site that are currently disturbed according to the dust generation potential of those areas and establish clear targets for the stabilisation of those areas (either permanent or temporary) with the objective of meeting the requirements of the Blue Book.
		b) operate a comprehensive air quality management system that uses a combination of predictive meteorological forecasting and real-time air quality monitoring data to guide the day-to-day planning of mining operations and the implementation of both proactive and reactive air quality mitigation measures to ensure compliance with the relevant conditions of this consent;	Air Quality Management Plan, Mt Thorley Warkworth, Rev 4.1 dated 28 July 2022			The Air quality management plan describes the air quality management system and procedures including the predictive tools.	Complies	

Project Approval SSD 6464 Warkworth Continuation Project (Mod 2)								
Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
S3 C19	Operating Conditions	c) minimise the air quality impacts of the development during adverse meteorological conditions and extraordinary events (see note d to Tables 5-7 above); and	Air Quality Management Plan, Mt Thorley Warkworth, Rev 4.1 dated 28 July 2022 Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023		During the site inspection, the Auditor observed water carts in operation. The auditor observed that minor levels of dust were being generated within the open cut, on haul roads, and in areas that were being stripped, although no evidence that dust was leaving the site at the time of the site inspection. Significant areas of the site have been cleared and progressive rehabilitation works are behind schedule. The Auditor also observed significant areas, that while not ready for final rehabilitation, would benefit from temporary stabilisation to help reduce dust emissions during adverse wind conditions.	Fifty-eight dust-related complaints were received during the audit period. No exceedances in dust criteria were reported during the audit period. Areas of the site are being cleared in preparation for mining, and the disposal of overburden is progressing. The planned progressive rehabilitation works are, however, behind schedule. The Auditor also observed areas, that while not ready for final rehabilitation, would benefit from temporary stabilisation to help reduce dust emissions during adverse wind conditions.	Non-compliant	Increase the rate of progressive rehabilitation works with the objective of meeting the established progressive rehabilitation targets. Prepare and implement a program for the stabilisation of unsealed / disturbed areas of the site including stockpiles, finished landforms, and disturbed areas that are not currently being actively worked / filled). The program should identify and classify all areas of the site that are currently disturbed according to the dust generation potential of those areas and establish clear targets for the stabilisation of those areas (either permanent or temporary) with the objective of meeting the requirements of the Blue Book.
		d) co-ordinate the air quality management on site with the air quality management at nearby mines (including the Mt Thorley, Bulga, Wambo and Hunter Valley Operations mines) to minimise any cumulative air quality impacts	Air Quality Management Plan, Mt Thorley Warkworth, Rev 4.1 dated 28 July 2022 Inter mine meeting minutes dated 29 June 2023 Email from Yancoal (G Mulhearn) to Peabody Wambo Coal dated February 8 2023	Environment and Community Manager - interactions on day to day observations regarding emissions from other mines are typically done by phone call – not often required at inspection locations of CROs, as these inspections are close to MTW operations.		Section 3.2 describes how MTW coordinate air quality management with the neighbouring mines. Evidence of interaction and coordination was provided and included inter mine coordination meeting minutes.	Complies	
S3 C20	Air Quality Management Plan	The Applicant must prepare a detailed Air Quality Management Plan for the development to the satisfaction of the Planning Secretary, and carry out the development in accordance with this plan. This plan must: a) be prepared in consultation with the EPA, and be submitted to the Planning Secretary for Approval prior to carrying out any development under this consent;	Air Quality Management Plan, Mt Thorley Warkworth, Rev 4.1 dated 28 July 2022 Letter from Yancoal (G. Mulhearn) to EPA (N Ryan) titled "Yancoal, Mt Thorley Warkworth EPA Consultation on Noise, Air Quality Blasting and Water Management Pland" dated 18 July 2018 Letter from EPA (N Ryan) to Yancoal (G Mulhearn) titled Environment Protection Licences 1376 and 1976 Environmental Management Plans" dated 19 July 2018 Independent Environmental Audit Report for Yancoal Mount Thorley Warkworth, Hansen Bailey, July 2020 Letter from DPE (J Fittell) to Yancoal (G.Mulhearn) titled "Mt Thorley Continuation Project (SSD -6465) and Warkworth Continuation Project SSD (6464) dated 8 August 2022			The AQMP was updated during this audit period and approved by DPE on the 8th of August 2022. The EPA, in 2018 elected to not provide comments on the air quality management plan.	Complies	

Project Approval SSD 6464 Warkworth Continuation Project (Mod 2)								
Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
		b) describe the measures that would be implemented to ensure compliance with the relevant air quality criteria and operating conditions of this consent;	Air Quality Management Plan, Mt Thorley Warkworth, Rev 4.1 dated 28 July 2022 Independent Environmental Audit Report for Yancoal Mount Thorley Warkworth, Hansen Bailey, July 2020			Section 5 and 6 of the AQMP describes management and mitigation measures to ensure compliance with criteria	Complies	
S3 C20	Air Quality Management Plan	c) describe the project air quality management system;	Air Quality Management Plan, Mt Thorley Warkworth, Rev 4.1 dated 28 July 2022 Independent Environmental Audit Report for Yancoal Mount Thorley Warkworth, Hansen Bailey, July 2020			Section 5 and 6 of the AQMP	Complies	
		d) include provisions for keeping the local community informed about the operation of the air quality management system and monitoring programs, including regular briefings and a public information session within 6 months of the granting of this development consent;	Air Quality Management Plan, Mt Thorley Warkworth, Rev 4.1 dated 28 July 2022 Independent Environmental Audit Report for Yancoal Mount Thorley Warkworth, Hansen Bailey, July 2020			Section 8 of the AQMP	Complies	
		e) include an air quality monitoring program that: <ul style="list-style-type: none"> adequately supports the proactive and reactive air quality management system; evaluates and reports on: <ul style="list-style-type: none"> the effectiveness of the air quality management system; and compliance against the air quality operating conditions; and defines what constitutes an air quality incident, and includes a protocol for identifying and notifying the Department and relevant stakeholders of any air quality incidents; and 	Air Quality Management Plan, Mt Thorley Warkworth, Rev 4.1 dated 28 July 2022 Independent Environmental Audit Report for Yancoal Mount Thorley Warkworth, Hansen Bailey, July 2020			Section 7 and Appendix A of the AQMP describes the air quality monitoring program.	Complies	
		f) include a protocol that has been prepared in consultation with the owners of nearby mines (including the Mt Thorley, Bulga, Wambo and Hunter Valley Operations) to minimise the cumulative air quality impacts of these mines and the development.	Air Quality Management Plan, Mt Thorley Warkworth, Rev 4.1 dated 28 July 2022	Manager Environment and Community - Current version of the AQMP is v4.1 (approved 8/8/2022). Changes to the AQMP since the last audit have occurred for v4.0 (approved 20/7/21), which included the detail of the inter-site communications protocol.		Section 3.2 of the AQMP addresses cumulative impacts and the details of the site protocol	Complies	
S3 C21	Meteorological Monitoring	For the life of the development, the Applicant must ensure that there is a meteorological station in the vicinity of the site that:	Monthly Maintenance Records – Charlton Ridge Met Station, 9 March 2021 Benchmark Monitoring Calibration Records for Solar Radiation, Relative Humidity, Wind Direction, Wind Speed and Type, Ambient Temperature, Rain Gauge and Wind Sensor		Weather Station (Photograph 3)	Calibration certificates confirm compliance with AS3580.	Complies	
		a) complies with the requirement in the Approved Methods for Sampling of Air Pollutant in New South Wales guidelines; and						
		b) is capable of continuous real-time measurement of temperature inversions in accordance with the NSW Industrial Noise Policy, unless a suitable alternative is approved by the Planning Secretary following consultation with the EPA.	Monthly Maintenance Records – Charlton Ridge Met Station, 9 March 2021			Monitoring records demonstrate that the met station provides real time continuous monitoring.	Complies	

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Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
S3 C22	Water Supply	The Applicant must ensure that is has sufficient water for all stages of the development, and if necessary, adjust the scale of mining operations to match its available water supply.	Water Management Plan, Mt Thorley Warkworth, Rev 5.2 dated 31 October 2021			There were no water supply issues during this audit period. Rainfall during this period was well above average. Section 6 of the water management plan provides details of water management activities to ensure adequate supply of water. This includes sources and security of water supply, water sharing with neighboring mines, off site water transfer and discharges.	Complies	
S3 C22A	Water Supply	The Applicant must report on water taken for each water source each year in the Annual Review	Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023			Table 6.12 of the Annual reviews provides details of the annual water balance including water inputs and outputs	Complies	
S3 C23	Compensatory Water Supply	The Applicant must provide a compensatory water supply to the owner of any privately-owned land whose basic landholder water rights as defined in the Water Management Act 2000 are adversely and directly impacted as a result of the development. This supply must be provided in consultation with NRAR, and to the satisfaction of the Planning Secretary. The compensatory water supply measures must provide an alternative long-term supply of water that is equivalent to the loss attributable to the development. Equivalent water supply should be provided (at least on an interim basis) as soon as practicable from the loss being identified, unless otherwise agreed with the landowner. If the Applicant 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 Planning Secretary for resolution. If the Applicant is unable to provide an alternative long-term supply of water, the Applicant must provide alternative compensation to the satisfaction of the Planning Secretary.		Environment and Community Manager – none were required during the audit period.		Compensatory water supplies were not required during the audit period	Not triggered	
S3 C24	Water Discharges	Unless an EPL or the EPA authorises otherwise, the Applicant must ensure that all surface water discharges from the site comply with the: a) discharge limits (both volume and quality) set for the development in any EPL; and	Annual Return (AR) Non-Compliance Detail Licence Number 1376, 01 Dec 2021 – 30 November 2022 (EPA Website) Annual Return Non-Compliance Detail Licence Number 1376, 01 Dec 2020 – 30 November 2021 (EPA Website) Annual Return Non-Compliance Detail Licence Number 1376, 01 Dec 2019 – 30 November 2020 (EPA Website)			The Annual Returns prepared for the Environment Protection Licence 1376 noted several non-compliances with this condition. Refer to audit schedule for EPL 1376 for details.	Non-compliant	A risk assessment and review of the storage capacity of the retention dams be undertaken that takes into account the increasing risk of extreme weather events, including extended duration wet weather patterns.
		b) relevant provisions of the POEO Act or Protection of the Environment Operations (Hunter River Salinity Trading Scheme) Regulation 2002	Annual Return (AR) Non-Compliance Detail Licence Number 1376, 01 Dec 2021 – 30 November 2022 (EPA Website) Annual Return Non-Compliance Detail Licence Number 1376, 01 Dec 2020 – 30 November 2021 (EPA Website) Annual Return Non-Compliance Detail Licence Number 1376, 01 Dec 2019 – 30 November 2020 (EPA Website)	Environment and Community Manager – no HRTS discharges during the audit period		No HRTS discharges occurred during the audit period	Complies	

Project Approval SSD 6464 Warkworth Continuation Project (Mod 2)								
Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
S3 C25	Water Transfers	The Applicant may receive water from, and transfer water to, the Mt Thorley mine, Hunter Valley Operations mine, Bulga mine and Redbank Power Station.	Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023 Water Management Plan, Mt Thorley Warkworth, Rev 5.2 dated 31 October 2021	Environment and Community Manager - Water sharing is noted in Water Management Plan, and in the EPLs for MTO and WML. MTO and WML are operated as a complex for water management. Agreements exist with HVO and Bulga Coal. Transfers are reported in the Annual Review reports. 2022 – 190ML transferred to Bulga Coal.		Noted, each Annual Review details water balances including external water sources	Noted	
S3 C26	Water Management Performance Measures	The Applicant must comply with the performance measures in Table 8 to the satisfaction of the Planning Secretary	Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023 Water Management Plan, Mt Thorley Warkworth, Rev 5.2 dated 31 October 2021		Photograph 4 Sediment Basin Photograph 5 Stabilised Drainage Channel			
		Feature	Performance Measure					
		Water management – General	Minimise the use of clean water (i.e. water not in contact with disturbed areas) on site Minimise the need for make-up water from external supplies (apart from permissible mine water transfers)		MTW operates and integrated water management system which includes clean and dirty water separation systems to minimise contact with disturbance systems.	This commitment is addressed in Sections 5.4-5.6, 7.4.2 and 8.4 WMP An annual water balance is undertaken that includes make up water from other sources.	Complies	
		Hunter River Alluvial Aquifer and Wollombi Brook Alluvial Aquifer	Negligible environmental consequences to the Hunter River alluvial aquifer and the Wollombi Brook alluvial aquifer beyond those predicted for the development			This commitment is addressed in Sections 5.4-5.6, 7.4.2 and 8.4 of the WMP. Groundwater monitoring locations have been established at the Hunter River alluvial aquifer and the Wollombi Brook alluvial aquifer. The results of the monitoring are summarized in section 6.7.6 of each Annual Return. Groundwater levels were reported as stable in both locations. There were some instances where groundwater levels increased	Complies	
		Lemington underground mine workings	During water transfers into the Lemington underground mine workings, retain a maximum fill level of 30m AHD in the Lemington underground mine workings or retain a buffer zone of 10m between the base of the Hunter River alluvium and the Lemington underground mine workings fill level; whichever gives the greater vertical separation	Environment and Community Manager - TW has not commenced water transfers to the Lemington underground mine workings and does not yet have infrastructure to do so. This will be incorporated into the WMP prior to commencing any water transfers to the Lemington underground mine workings		Not triggered as there has been no water transfers to the Lemington mine.	Not triggered	
		Construction and operation of infrastructure	Design, install and maintain erosion and sediment controls generally in accordance with the series Managing Urban Stormwater: Soils and Construction including Volume 1, Volume 2A – Installation of Services and Volume 2C – Unsealed Roads Design, install and maintain the infrastructure within 40 m of watercourses generally in accordance with the Guidelines for Controlled Activities on Waterfront Land (DPI 2007), or its latest version Design, install and maintain any creek crossings generally in accordance with the Policy and Guidelines for Fish Habitat Conservation and Management (DPI, 2013) and Why Do Fish Need To Cross The Road? Fish Passage Requirements for Waterway Crossings (NSW Fisheries 2003), or their latest versions	Community and Environment Manager - Design by WSP for sediment dams in 2020, including as built catchment review. -Design by WSP for sediment dams in 2023. Also included is a review by a CPESC–on the approach to sediment basin sizing in accordance with the blue book.	Erosion and Sediment controls including sediment dams, clean and dirty water diversions and rehabilitation activities (to provide groundcover and prevent erosion) were observed during the site inspection	This commitment is included in Table 5.1 of the WMP. Erosion and Sediment controls including sediment dams, clean and dirty water diversions and rehabilitation activities (to provide groundcover and prevent erosion) were installed WSP have undertaken catchments assessments and have designed in accordance with the Blue Book requirements, thus has been reviewed by a Certified Professional in Erosion and Sediment Control	Complies	
	Clean water diversion & storage infrastructure	Design, install and maintain the clean water system to capture and convey the 100 year ARI flood. Maximise as far as reasonable and feasible the diversion of clean water around disturbed areas on site			This commitment is included in Table 5.1 of the WMP. Clean water diversions were observed on site to prevent interaction with disturbed areas	Complies		

Project Approval SSD 6464 Warkworth Continuation Project (Mod 2)								
Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
		Sediment dams	Design, install and/or maintain the dams generally in accordance with the series Managing Urban Stormwater: Soils and Construction – Volume 1 and Volume 2E Mines and Quarries			This commitment is included in Table 5.1 of the WMP Sediment dams were installed and appeared to be maintained in accordance with the Blue Book	Complies	
S3 C26	Table 8	Mine water storages	Design, install and/or maintain mine water storage infrastructure to ensure no discharge of mine water off-site (except in accordance with condition 24) On-site storages (including mine infrastructure dams and treatment dams) are suitably designed, installed and/or maintained to minimise permeability Maintain adequate freeboard within the pit void at all times to minimise the risk of discharge to surface waters	Community and Environment Manager Dam 46N for WML 4/1/21. Outcome – Penalty Notice from DPE and EPA. -- New north drain installed to redirect catchment to alternate dam was completed in 2021. Discharge from CC5 sump for WML 4/7/22. Outcome – “Recorded by DPE”		This commitment is included in Table 5.1 of the WMP. There have been two incidents that resulted in the discharge of mine-water. The incident on 4/1/21 was from a water equipment park up area has spilled from a dam into a water course reporting into Wollombi Brook, the incident resulted penalty notices issued by both the DPE and EPA. In response to the Penalty notices, WML prepared an action plan which includes several actions relating to detailed engineering assessment, design and construction of civil infrastructure for improved surface water drainage infrastructure at WML North Pit North. Correspondence from DPE and WML confirms that the detailed design works for the North Pit North drainage improvements were completed in October 2021. The incident on 4/7/22 was reported as an overtopping event during a greater than design rainfall event. It was reported that samples were collected with no environmental harm caused. No further actions to prevent recurrence were proposed by WML.	Non-compliant	In relation to the incident on the 4/7/21, no further actions are recommended over and above the actions taken by WML in response to the incident. In response to the incident on the 4/7/22, it is recommended that a risk assessment and review of the storage capacity of the retention dams be undertaken that takes into account the increasing risk of extreme weather events, including extended duration wet weather patterns.
		Flood mitigation measures	Design, install and maintain flood mitigation measures along the western side of the development, to ensure there is adequate freeboard (at least 500mm) between the Probable Maximum Flood level in Wollombi Brook and the crest levee or peak of the flood mitigation infrastructure. Residual impacts downstream must be managed in an appropriate manner.	Community and Environment Manager - A 2016 flood study engaged by Singleton Council by BMT WBM identified the PMF (Extreme Flood) RL as 69.3m at Bulga Bridge, and 62.8m at Warkworth. Figure 9-5 on page 122 of the PDF flood report includes a figure of Design Flood Extents, including the PMF. It is only MTO that shows potential for flood extent reaching the pit. For WML the flood extent is some distance from the pit. Evidence has previously been sought from the BMT WBM that the Charlton Levee is RL 70.5m, and the corresponding PMF level of 70.0m exists in that area.		This commitment is included in Section 7.5.2 of the WMP BMT global (hydrologists) have reviewed the height of the flood level and have confirmed a 500mm freeboard exists between the PMF level and the height of the crest of the flood levee	Complies	
		Overburden emplacements	Design, install and maintain emplacements to encapsulate and prevent migration of tailings, acid forming and potentially acid forming materials, and saline and sodic material Design, install and maintain emplacements to prevent off-site migration of saline groundwater seepage	Incident Register		This commitment is addressed in Sections 5.4-5.6, 7.4.2 and 8.4 of the WMP. Incidents involving the release of tailings or acid forming materials were recorded for the audit period.	Complies	
		Chemical and hydrocarbon storage	Chemical and hydrocarbon products to be stored in bunded areas in accordance with the relevant Australian Standards		Appropriate bunding was provided around hydrocarbon storage tanks, other fuels and chemicals were observed to be stored in designated chemical storage containers	This commitment is included in Table 5.1 of the WMP. Appropriate bunding was provided around hydrocarbon storage tanks, other fuels and chemicals were observed to be stored in designated chemical storage containers	Complies	

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Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
S3 C27	Water Management Plan	The Applicant must prepare a Water Management Plan for the development to the satisfaction of the Planning Secretary and carry out the development in accordance with this plan. The plan must:	Water Management Plan, Mt Thorley Warkworth, Rev 5.1 dated 31 October 2021 Letter from Yancoal (G. Mulhearn) to EPA (N Ryan) titled "Yancoal, Mt Thorley Warkworth EPA Consultation on Noise, Air Quality Blasting and Water Management Plan" dated 18 July 2018 Independent Environmental Audit Report for Yancoal Mount Thorley Warkworth, Hansen Bailey, July 2020			The Water Management Plan was revised in 2021.	Complies	
		a) be prepared in consultation with the EPA and DPE Water and submitted to the Planning Secretary for approval prior to carrying out any development under this consent; and	Letter from EPA (N Ryan) to Yancoal (G Mulhearn) titled Environment Protection Licences 1376 and 1976 Environmental Management Plans" dated 19 July 2018 Letter from Yancoal (G.Mulhearn) to DPE (M Sprott) titled "Mount Thorley Warkworth updated Water Management Plan" dated 20 December 2019 Letter from DPE (M Sprott) to Yancoal (G Mulhearn) titled "Mount Thorley Water Management Plan, dated 13 May 2020 Independent Environmental Audit Report for Yancoal Mount Thorley Warkworth, Hansen Bailey, July 2020			There were several revisions of the Water Management Plan approved by DPE during the audit period. These were: <ul style="list-style-type: none"> Version 4.4 (approved by DPE on the 13th of May 2020 Version 5.1 (approved by DPE on the 15 November 2021 The evidence of consultation provided in Appendix A of the WMP covers the previous versions of the plan. The EPA or DPE Water were not consulted during the preparation of the most recent version of the plan or that the plan has been approved by DPE. In their letter dated 20 December 2019, Yancoal requested the agreement of the Secretary to revise the plan without undertaking any consultation with the relevant parties. DPE confirmed the requirement to undertake consultation with DPE and NRAR prior to the next revision of the water management plan and include evidence of the consultation when submitting their revised document.	Complies	
		b) in addition to the standard requirements for management plans (see condition 3 of schedule 5), include a: <ul style="list-style-type: none"> (i) Site Water Balance that: <ul style="list-style-type: none"> includes details of: <ul style="list-style-type: none"> sources and security of water supply, including contingency planning for future reporting periods; water use and management on site, including details of water sharing between neighbouring mining operations; any off-site water transfers and discharges; reporting procedures, including the preparation of a site water balance for each calendar year; and the methodology used to quantify the annual groundwater inflow into the Lemington underground mine workings during the period water is to be stored and extracted, and the ongoing maximum annual groundwater inflow after these activities have ceased; and investigates and implements all reasonable and feasible measures to minimise water use on site; 	Water Management Plan, Mt Thorley Warkworth, Rev 5.1 dated 31 October 2021			Section 6 of the Water Management Plan provides details of water sources (inputs) and water uses (outputs) for the site. These figures have been used to design the water management system, including the sizing of sediment basins. Since 2018 (likely due to the effects of global warming and La Nina) there has an increase in the frequency and duration of extreme rainfall events, with 2022 one of the wettest years on record. There have been several instances where overtopping of sediment basins may have been due to larger than normal rainfall events resulting in exceedance of design criteria.	Complies	MTW review the water balance model to take into account the impacts of climate, for example the impacts of higher-than-normal rainfall events due to more extreme La-Nina events.

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Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
S3 C27	Water Management Plan	<p>(ii) Surface Water Management Plan, that includes:</p> <ul style="list-style-type: none"> • detailed baseline data on surface water flows and quality in the watercourses that could potentially be affected by the development; • a 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); and - mine water management systems including irrigation areas; • 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 coal reject materials; - 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 development: <ul style="list-style-type: none"> - mine water management system; - surface water quality of Loaders Creek; and - channel stability, stream and riparian vegetation health of Loaders Creek; • a program to monitor and report on: <ul style="list-style-type: none"> - the effectiveness of the mine water management system; and - surface water flows and quality, stream and riparian vegetation health in Loaders Creek potentially affected by the development; • a plan to respond to any exceedances of the performance criteria, and mitigate and/or offset any adverse surface water impacts of the development; and 	Water Management Plan, Mt Thorley Warkworth, Rev 5.1 dated 31 October 2021			<p>Sections 6,7 and 9 of the WMP.</p> <p>The Water management plan doesn't consider water treated and discharged from the site sewage treatment plant.</p>	Complies	That the WMP is updated to reflect water volumes and quality from the STP, as well as any necessary treatment and/or testing
		<p>(iii) Groundwater Management Plan, which includes:</p> <ul style="list-style-type: none"> • detailed baseline data on groundwater levels, yield and quality in the region, and privately-owned groundwater bores, that could be affected by the development; • groundwater assessment criteria, including trigger levels for investigating any potentially adverse groundwater impacts; • a program to monitor and report on: <ul style="list-style-type: none"> - groundwater inflows to the open cut pits; - the seepage/leachate from water storages, emplacements, backfilled voids, and final voids; - the impacts of the development 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 and riparian vegetation; o base flows to Loaders Creek; 	Water Management Plan, Mt Thorley Warkworth, Rev 5.1 dated 31 October 2021			Section 8 and 9 of the WMP	Complies	

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Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
		<ul style="list-style-type: none"> a plan to respond to any exceedances of the groundwater assessment criteria; and a program to validate the groundwater model for the development. including an independent review of the model with every independent environmental audit, and compare the monitoring results with modelled predictions. 						
S3 C28	Biodiversity Retirement of Credits	Within 3 years of the date of commencement of development under this approval, the applicant will retire biodiversity credits of a class and number specified in Tables 9 and 10 below to the satisfaction of BCD.				DPE has yet to approve the retirement of biodiversity credits. However, it is acknowledged that some components such as the provision of supplementary measures (such as funding of research) have been met.	Non-compliant	As the retirement of requisite credits is now over 4 years overdue, it is recommended that negotiations with the Department/BCD/BCT to reach an agreeable solution are given priority
	Biodiversity Retirement of Credits	The retirement of these credits must be carried out in accordance with the NSW Biodiversity Offsets Policy for Major Projects and can be achieved by: (a) acquiring or retiring credits under the Biobanking Scheme in the TSC Act; (b) making payments into an offset fund that has been developed by the NSW Government; or (c) providing supplementary measures.				Refer to S3 C28	Noted	
S3 C28	Table 9	Vegetation Community	Code (BVT)	Biometric Vegetation Type	area	EEC		
		Warkworth Sands Woodland	HU872	Rough-barked Apple - Narrow-leaved Ironbark - Blakely's Red Gum - Bull Oak - Coast Banksia woodland on sands of the Warkworth area	72.12	Warkworth Sands Woodland in the Sydney Basin Bioregion EEC		
		Warkworth Sands Grassland	HU872	Rough-barked Apple - Narrow-leaved Ironbark - Blakely's Red Gum - Bull Oak - Coast Banksia woodland on sands of the Warkworth area	0.67	na		
		Central Hunter Grey Box - Ironbark Woodland	HU817	Narrow-leaved Ironbark - Bull Oak - Grey Box shrub - grass open forest of the central and lower Hunter	614.6	Central Hunter Grey Box-Ironbark Woodland in the New South Wales North Coast and Sydney Basin Bioregions EEC		
		Regenerating Central Hunter Grey Box - Ironbark Woodland	HU817	Narrow-leaved Ironbark - Bull Oak - Grey Box shrub - grass open forest of the central and lower Hunter	6.43	Central Hunter Grey Box-Ironbark Woodland in the New South Wales North Coast and Sydney Basin Bioregions EEC		
		Central Hunter Grey Box - Ironbark Derived Grassland	HU817	Narrow-leaved Ironbark - Bull Oak - Grey Box shrub - grass open forest of the central and lower Hunter	378.6	na		
		Central Hunter Ironbark - Spotted Gum - Grey Box Forest	HU818	Narrow-leaved Ironbark - Grey Box - Spotted Gum shrub - grass woodland of the central and lower Hunter	16.61	Central Hunter Ironbark-Spotted Gum-Grey Box Forest in the New South Wales North Coast and Sydney Basin Bioregions EEC		
Table 10	Species	Credits Required						
	Regent Honeyeater	18,929						
	Southern Myotis	18,222						
	Large eared Pied Bat	139						

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Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
S3 C29	Rehabilitation Offsets	Within 10 years of the completion of mining operations under this consent, the Applicant must retire ecosystem credits of a number and class specified in Table 11 to the satisfaction of BCD.	SSD – 6464 MOD 2 Conditions of consent, dated 27 May 2022 Ecological Monitoring reports for Rehab areas for 2021 (Emergent Ecology/Dendra Systems) and 2022 (Emergent Ecology/Mosaic Ecology).			<p>The consent for SSD 6464 allows the applicant to carry out mining operations for 21 years on site from date of commencement of the development. As the date of commencement was 15 Feb 2016, mining operations may continue till 15 February 2037. Therefore, credits as per Table 11 must be retired before 15 Feb 2047 (i.e within 10 years of completion of the mining operations).</p> <p>While this consent condition is technically not yet triggered, rehab works will need to be conducted to a suitable standard to generate the requisite number of credits (though it is acknowledged at the mechanism for credit calculations is yet to be agreed upon).</p> <p>Ecological reports detail findings of monitoring of ecological works being conducted in rehab areas. While some criteria are meeting relevant targets, further works, particularly in areas in early phases of treatment, are required to meet long term targets to establish self-sustaining ecosystems.</p>	Not Triggered	<p>Recommendations to achieve targets, as detailed in the Ecological monitoring reports, include:</p> <p>More intensive weed control of High Threat Weeds;</p> <p>Control of overly dominant natives (e.g Corymbia maculate, Acacia species) via thinning or changes to seed mix; and</p> <p>Improved distribution of ground habitat features (such as logs);</p>
	Table 11	Vegetation Community	Code (BVT)	Biometric Vegetation Type	area	EEC		
		Central Hunter Grey Box - Ironbark Woodland	HU817	Narrow-leaved Ironbark - Bull Oak - Grey Box shrub - grass open forest of the central and lower Hunter	2,100	Central Hunter Grey Box-Ironbark Woodland in the New South Wales North Coast and Sydney Basin Bioregions EEC		
S3 C29	Rehabilitation Offsets	The retirement of these credits must be carried out in accordance with the NSW Biodiversity Offsets Policy for Major Projects and can be achieved by:(a) retiring credits generated by mine rehabilitation;(b) acquiring or retiring credits under the biobanking Scheme in the TSC Act;(c) making payments into an offset fund that has been developed by the NSW Government; or(d) providing supplementary measures.	SSD – 6464 MOD 2 Conditions of consent, dated 27 May 2022			<p>This consent condition is technically not yet triggered, as the credits from the rehab areas have to be generated within 10 years of completion of mining operations.</p> <p>It is acknowledged at the mechanism for credit calculations is yet to be agreed upon, in light of recent changes to biodiversity legislation and offset mechanisms.</p> <p>An agreement with the Department/BCD for calculations of credits from rehab areas in light of changes to biodiversity legislations and credit calculation methods, is yet to be reached.</p> <p>It is also noted that the NSW Biodiversity Offsets Policy for Major Projects and the Biobanking Scheme are no longer available due to changes to Biodiversity legislation</p>	Not Triggered	It is recommended that any future modification to the Approval consider seeking to remove specific mentions of the use of the NSW Biodiversity Offsets Policy for Major Projects as this is no longer available
S3 C30	Direct Land-based Offsets	Within 3 years of the date of commencement of the development under this consent, the Applicant must secure offset areas listed in Table 12 under an in-perpetuity conservation mechanism such as entering into a biobank agreement, in accordance with the relevant provisions of the TSC Act. The direct land-based offsets may be used as offsets for any approval required under the EPBC Act for this development.	SSD – 6464 MOD 2 Conditions of consent, dated 27 May 2022 Correspondence as cited for S3 C28	Onsite discussion with Yancoal environmental staff during site inspection on 26 Apr 2023	Inspections of Northern and Southern Biodiversity Areas.	<p>Date of commencement was 15 Feb 2016, therefore offset areas were to be secured under an in-perpetuity mechanism 14 February 2019 (i.e. within 3 years of commencement).</p> <p>Despite documentation/correspondence between WML, the Department and BCD since 2018, which has included submission of a modification application to DPE (SSD-6464 MOD1) to address securing of the offsets, this item remains incomplete. Actions are currently still being undertaken to reach an agreeable resolution with BCD and the department. However, no written correspondence between WML and the Department/BCD has been sited since the February 2022 correspondence.</p>	Non-compliant	As the securing of offset areas under an appropriate mechanism is now over 4 years overdue, it is recommended that negotiations with the Department/BCD/BCT to reach an agreeable solution are given priority

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Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
	Table 12	Off Set Area	Minimum Size					
		Northern Biodiversity Area	303					
		Southern Biodiversity Area	705					
		Goulburn River Biodiversity Area	1,063					
		Bowditch Biodiversity Area	520					
		Putty Road Biodiversity Area	94					
		2003 Warkworth Sands Woodland Area	155.8					
		North Rothbury Biodiversity Area (Hanwood Estate)	40					
S3 C30A	Direct Land-based Off sets	The Applicant may subdivide the Northern Biodiversity Area in accordance with Figure 14A of Appendix 4 of this consent and with the requirements of the EP&A Act and EP&A Regulation, to allow for transfer of ownership of the remainder of the lot(s) to satisfy the requirements of MP 06_0261.		Discussion with Yancoal environmental staff during site inspection on 26 Apr 2023		No documents regarding subdivision of land sighted. However, subject re subdivision of Northern Biodiversity area mentioned by environmental staff during onsite inspection on 26 Apr 2023	Complies	
S3 C31	Direct Land-based Off sets	The Applicant may use the ecosystem and species credits generated by the establishment of an in perpetuity conservation mechanism such as a biobank agreement for all of these offset areas, apart from those credits generated for Putty Road Biodiversity Area and 2003 Warkworth Sands Woodland Area, to retire the biodiversity credit requirements of the development under Condition 28. All ecosystem and species credits generated by the establishment of an in-perpetuity conservation mechanism for the Putty Road Biodiversity Area and 2003 Warkworth Sands Woodland Area must be retired permanently upon the establishment of an in perpetuity conservation mechanism of these areas, and may not be used to retire any other credit requirements.	Warkworth Mine Biodiversity Management Plan (2018)	Environment and Community Manager - There is no time-based criteria and the condition states WML "may" use species credits apart from those generated from the Putty Road and WSW area. WML has not used credits from those areas		No in-perpetuity conservation mechanism currently in place for any of the offset areas	Noted	As the retirement of requisite credits is now over 4 years overdue, it is recommended that negotiations with the Department/BCD/BCT to reach an agreeable solution are given priority
S3 C32	Additional Warkworth Sands Woodland Measures	Within 6 months of the commencement of development under this consent, the Applicant must: (a) develop suitable performance criteria to the satisfaction of BCD for determining the successful regeneration of the Warkworth Sands Woodland EEC in the Northern Biodiversity Area within 15 years from the commencement of development under this consent; and	Northern Biodiversity Area Management Plan (V6, dated July 2022)	-	Parts of Northern Biodiversity Area, in particular Warkworth Sands Woodland areas inspected during site inspection on 25 Apr 2023	Reviewed Biodiversity Management Plan for the Northern Offset Area which includes Appendix B, that deals with performance criteria for Warkworth Sands Woodland regeneration. Criteria first provided in Ver 3 (dated August 2018) and retained in subsequent versions. Document approved by DPIE 20 July 2021. During the site inspection it was noted that while canopy and mid-story species are progressing well, groundcover in areas inspected had a low diversity of non-grass native species (e.g. herbs, forbs, ferns)	Complies	Additional work is required to meet the final performance criteria at the end of the 15-year period. In particular it is recommended that consideration is given to amending seed mixes to include a higher diversity of non-grass native species to increase groundcover diversity.
		(b) lodge a bond (in the form of a bank guarantee) of \$1 million (indexed to CPI) with BCD.	Independent Environmental Audit Report for Yancoal Mount Thorley Warkworth, Hansen Bailey, July 2020			Assessed as compliant by the 2020 audit which noted that evidence of the bond was provided and cited in previous audit periods.	Complies	
S3 C33	Additional Warkworth Sands Woodland Measures	If, at the end of 15 years from the commencement of development under this consent, the regeneration of Warkworth Sands Woodland EEC in the Northern Biodiversity Area meets the performance criteria to the satisfaction of BCD, the BCD must refund the bond to the applicant. If, however, the regeneration does not meet the performance criteria to the	Northern Biodiversity Area Management Plan (V6, dated July 2022)			Date of commencement of development was 15 Feb 2016 therefore this condition is not required to be fulfilled until 15 Feb 2031	Not Triggered	

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Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
		satisfaction of BCD, then the Applicant will forfeit the bond to BCD for use by BCD for the regeneration of Warkworth Sands Woodland EEC in the local area, or equivalent strategic conservation initiatives in the region.						
S3 C34	Additional Warkworth Sands Woodland Measures	Within 12 months of the commencement of the development under this consent, the Applicant must prepare an Integrated Management Plan for the Warkworth Sands Woodland EEC to the satisfaction of BCD. This plan must be prepared in consultation with the owners of Wambo and Bulga Mines, and outline the measures that would be implemented to coordinate management and recovery efforts for the EEC.	Warkworth Sands Woodland Integrated Management Plan (2017) Warkworth Sands Woodland Integrated Management Plan (2018) Email correspondence between Bill Baxter (Yancoal), Steven Cox (BCD), Robert Gibson (BCD) and Jessica Blair (Yancoal) between 24 Apr 2020 and 20 Oct 2020			Correspondence sighted confirmed that BCD had received the WSW IMP as submitted by WML. Correspondence from BCD confirmed that the review of the 2018 IMP was largely complete. However no subsequent correspondence sighted and no correspondence/documentation provided regarding approval of WSW IMP provided. It is noted that the WSW IMP has been prepared and provided to BCD. Non-compliance is mainly due to the document not yet being approved by BCD (i.e not approved within 12 months of the commencement of the development.	Non-compliant	Work with BCD to progress the outstanding approval as a high priority.
S3 C35	Additional Warkworth Sands Woodland Measures	Within 6 months of the commencement of development under this consent, the Applicant must contribute \$1 million to BCDs Saving Our Species - Regent Honeyeater conservation program. The Contribution may be used as a supplementary measure for any approval required under the EPBC Act for this development.	Independent Environmental Audit Report for Yancoal Mount Thorley Warkworth, Hansen Bailey, July 2020 Service level agreement document between OEH and Taronga Conservation Society Australia regarding payment of \$1 million from Warkworth Mining developer contributions for Regent Honeyeater recovery actions			2020 Audit confirmed that the MTW Regent Honeyeater Conservation Program internal proposal was viewed and that no date requesting payment contribution be made prior to 15/8/16. As per 2017 audit, money was sent and collected. PO raised 6/7/16. Sighted Service level agreement between OEH and Taronga Conservation Society for developer contributions (\$1 million) for Regent Honeyeater Recovery Actions	Complies	
S3 C36	Biodiversity Management Plan	The Applicant must prepare a Biodiversity Management Plan for the development to the satisfaction of the Planning Secretary, and carry out the development in accordance with this plan. The Plan must:	Warkworth Mine, Biodiversity Management Plan, Yancoal Warkworth Mine, Revision 6, NSW September 2018 Southern Biodiversity Management Plan, Revision 6, July 2022 Northern Biodiversity Management Plan, Revision 6, July 2022 Warkworth Sands Woodlands, Integrated Management Plan, Revision 1 15 February 2017 Bowditch Management Plan, Revision 3, July 2022 North Rothbury, Biodiversity Management Plan, Revision 3, July 2022 Putty Management Plan, Revision 3 July 2022 Goulburn River Management Plan, Revision 3 July 2022 Seven Oaks Management Plan, Revision 3, 27 July 2022 Condon View Management Plan Version 4, July 2022 Independent Environmental Audit Report for Yancoal Mount Thorley Warkworth, Hansen Bailey, July 2020 Letter from DPE (M Sprott) to Warkworth Mining Limited (G Mulhearn) titled "Biodiversity Management Plans for Mt Thorley Continuation Project (SSD 6464 and Warkworth Continuation Project SSD 6464)" dated 12 August 2022			Assessed as compliant by the 2020 audit which noted that DPE approved the plan on the 20 th of September 2018 Biodiversity Management Plans have been reviewed and resubmitted to DPE for approval. On 12 August 2022, DPE approved the following Biodiversity Area Management Plans - Southern Biodiversity Area Management Plan – Version 6 - Northern Biodiversity Area Management Plan – Version 6 - Bowditch Biodiversity Area Management Plan – Version 3 - Condon View Biodiversity Area Management Plan – Version 4 - Goulburn River Biodiversity Area Management Plan – Version 3 - North Rothbury Biodiversity Area Management Plan – Version 3 - Putty Area Management Plan – Version 3 - Seven Oaks Biodiversity Area Management Plan Version 3	Complies	

Project Approval SSD 6464 Warkworth Continuation Project (Mod 2)								
Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
		(a) be prepared in consultation with BCD and submitted to the Planning Secretary for approval prior to the commencement of any development under this consent;	Warkworth Mine, Biodiversity Management Plan, Yancoal Warkworth Mine, Revision 6, NSW September 2018 Independent Environmental Audit Report for Yancoal Mount Thorley Warkworth, Hansen Bailey, July 2020			Assessed as compliant by the 2020 audit which noted that DPE approved the plan on the 20 th of September 2018. Attachment B of the plan provides evidence of consultation with OEH. DPE have approved amendments to the Plan as noted in SC36 (above)	Complies	
S3 C36	Biodiversity Management Plan	(b) describe the short, medium and long term measures that would be implemented to: - manage the remnant vegetation and fauna habitat on the site; - implement the biodiversity offset strategy described in the EIS; - regenerate and conserve Warkworth Sands Woodland EEC in the biodiversity areas; - integrate the implementation of the biodiversity offset strategy to the greatest extent practicable within the rehabilitation of the site;	Warkworth Mine, Biodiversity Management Plan, Yancoal Warkworth Mine, Revision 6, NSW September 2018 Independent Environmental Audit Report for Yancoal Mount Thorley Warkworth, Hansen Bailey, July 2020			Assessed as compliant by the 2020 audit which noted that short term measures are described in Section 4 of the WML Biodiversity Management Plan, with long term measures provided in each Operations Management Plan for offset sites	Complies	
		(c) include detailed performance and completion criteria for evaluating the performance of the biodiversity offset strategy (including the regeneration of Warkworth Sands Woodland) and triggering remedial action if necessary;	Independent Environmental Audit Report for Yancoal Mount Thorley Warkworth, Hansen Bailey, July 2020			Assessed as compliant by 2020 audit, provided in Section 3.3.2 for operational lands (mine rehabilitation) and Section 4 for biodiversity offset areas. Trigger, response and remedial actions provided in Attachment A. Specific performance criteria also given in each OMP	Complies	
		(d) include a detailed description of the measures that would be implemented over the next 3 years for: - regenerating Warkworth Sands Woodland in the biodiversity offset areas; - protecting vegetation and fauna habitat outside the approved disturbance area on-site; - enhancing the quality of existing vegetation and fauna habitat on the site and in the biodiversity offset areas; - minimising clearing and avoid unnecessary disturbance; - maximising the salvage of resources within the approved disturbance area - including vegetative and soil resources - for beneficial use in the enhancement of any land based offsets or the rehabilitation of the site; - collecting and propagating seed; - minimising the impacts on fauna on-site, including undertaking pre-clearance surveys; - managing salinity using best practise dryland salinity management revegetation measures; - controlling weeds and feral pests; - controlling erosion; - managing grazing and agriculture on site; - controlling access; and - bushfire management.	Independent Environmental Audit Report for Yancoal Mount Thorley Warkworth, Hansen Bailey, July 2020			Assessed as compliant by 2020 Audit. Measures are described included in Sections 1,3,4,5 and Table 17	Complies	

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Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
S3 C36	Biodiversity Management Plan	(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; and				Assessed as compliant by 2020 Audit, summarised in Section 3.3.2.3 and Section 4.2.3 of BMP.	Complies	
		(f) identify the potential risks to the successful implementation of the biodiversity offset strategy (including regeneration of the Warkworth Sands Woodland), and to include a description of the contingency measures that would be implemented to mitigate these risks; a				Assessed as compliant by 2020 Audit. Risk assessment and corrective actions to mitigate these risks are provided in Section 6 of each OMP.	Complies	
		(g) include details of who would be responsible for monitoring, reviewing, and implementing the plan.				Assessed as compliant by 2020 Audit. Provided in Section 1.3.3 of the WMP BMP	Complies	
S3 C37	Conservation Bond	Within 3 months of the approval of the Biodiversity Management Plan, unless otherwise agreed by the Planning Secretary, the Applicant must lodge a Conservation Bond with the Department to ensure that the biodiversity offset strategy is implemented in accordance with the performance and completion criteria of the Biodiversity management Plan.	Letter from Deutsche Bank (A.G) to Department of Planning titled "Guarantee Number 802/GTE/7738" dated 29 July 2016 Commonwealth Bank – Bank Guarantee Number 600578461 dated 4 September 2017 Letter from DPE (S Brooks) to Principal Advisor "Offsets" Coal and Allied titled " Warkworth Mine – Time Extension for the submission of the conservation bond as required by Condition 11 Schedule 5 of DA 300-9-2001 (i) MTW 2017 Independent Environmental Audit, 2017 Independent Audit Report, Jacobs, 8 August 2018			Assessed as compliant by the 2020 Audit, noting bank guarantee number 802/GTE/7738 dated 29 July 2016 sighted for proposed conservation bond and acknowledged as appropriately calculated by DP&E dated 10/5/16.	Complies	
		The sum must be determined by: (a) calculating the full cost of implementing the biodiversity offset strategy (other than land acquisition costs); and	Letter from DPE (W.Jones) to Principal Advisor "Offsets" Coal and Allied titled "Approval of the Warkworth SSD 6464 Conservation Bond Calculation.			DPE approved the calculation of the biodiversity offsets to the value of \$ 3971,961) for the first year period on the 10 th of May 2016.	Complies	
		(b) employing a suitably qualified quantity surveyor to verify the calculated costs, to the satisfaction of the Planning Secretary. If the offset strategy is completed generally in accordance with the completion criteria in the Biodiversity Management Plan to the satisfaction of the Planning Secretary, the Planning Secretary will release the bond. If the offset strategy is not completed in accordance with the completion criteria in the Biodiversity Management Plan, the Planning Secretary will call in all, or part of, the conservation bond, and arrange for the satisfactory completion of the relevant works.	Letter from DPE (W.Jones) to Principal Advisor "Offsets" Coal and Allied titled "Approval of the Warkworth SSD 6464 Conservation Bond Calculation			Assessed as compliant by the 2017 audit. No specific documentation in relation to the Conservation Bond sighted in current audit period. However prior audit period sighted Bank Guarantee number 802/GTE/7738 dated 29 July 2016 for proposed conservation bond and acknowledged as appropriately calculated by DP&E dated 10/5/16	Complies	

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Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
S3 C38	Heritage Wollombi Brook Aboriginal Cultural Heritage Conservation Area	The Applicant must prepare a conservation Management plan for the Wollombi Brook Aboriginal Cultural Heritage Conservation Area to the satisfaction of the Planning Secretary and carry out the development in accordance with this plan. The plan must: (a) be prepared in consultation with BCD and aboriginal stakeholders, and submitted to the Planning Secretary for approval prior to any development to the west of Wallaby Scrub Road under this consent unless otherwise agreed by the Planning Secretary;	Wollombi Brook Aboriginal Cultural Heritage Conservation Area Plan of Management 2017 – 2021 Letter from DPE (H.Reed) to Yancoal (A Speechly) titled "Mount Thorley Warkworth Operations (SSD 6464 and SSD 6465) Approval of Management Plans dated 11 October 2017 Independent Environmental Audit Report for Yancoal Mount Thorley Warkworth, Hansen Bailey, July 2020			Assessed as compliant by the 2020 Audit. The Department approved the Management Plan on the 11 th of October 2017 noting the Department is satisfied they meet the relevant criteria under SSD 6464 and 6465.	Complies	
		(b) describe the measures that would be implemented to provide for the protection, conservation and enhancement of aboriginal values in the area;	Wollombi Brook Aboriginal Cultural Heritage Conservation Area Plan of Management 2017 – 2021 Independent Environmental Audit Report for Yancoal Mount Thorley Warkworth, Hansen Bailey, July 2020			Assessed as compliant by the 2020 Audit, Measures are outlined in Section 4.2, 7 and 10.2 of the Wollombi Brook ACHCA	Complies	
		(c) include a program/procedures for: - protection and management of aboriginal sites, including protocols for the establishment of strictly controlled non-access zones and protocols around culturally sensitive areas; - maintaining and managing access to the area by the relevant Aboriginal stakeholders, including establishment of areas for active Aboriginal cultural heritage and landscape management; and - ongoing consultation and involvement of the relevant Aboriginal stakeholders in the conservation and management of Aboriginal cultural heritage in the area.	Wollombi Brook Aboriginal Cultural Heritage Conservation Area Plan of Management 2017 – 2021 Independent Environmental Audit Report for Yancoal Mount Thorley Warkworth, Hansen Bailey, July 2020			Assessed as compliant by the 2020 Audit, Program and procedures are outlined in Section 7, 3, 5 and 5 of the Wollombi Brook ACHCA	Complies	
		(d) investigate the potential for collaborative management of the Aboriginal heritage values of the land within the Southern Biodiversity Area and the adjoining Wambo-owned land adjacent to the conservation area, in consultation with the owner of the Wambo mine; and	Wollombi Brook Aboriginal Cultural Heritage Conservation Area Plan of Management 2017 – 2021			Assessed as compliant by the 2020 Audit. Provided in Section 4.2.2 and 5 of the Wollombi Brook ACHCA.	Complies	
		(e) include an action plan for the implementation of the plan, including establishment and ole of the Wollombi Brook Aboriginal Cultural Heritage Conservation Area management committee in overseeing implementation of the plan.				Assessed as compliant by the 2020 Audit. Provided in Section 8 of the Wollombi Brook ACHCA.	Complies	
S2 C39	Heritage Wollombi Brook Aboriginal Cultural Heritage Conservation Area	Prior to carrying out any development to the west of Wallaby Scrub Road under this consent, unless the Planning Secretary agrees otherwise, the Applicant must enter into a conservation agreement or agreements pursuant to section 69B of the National Parks and Wildlife Act 1974 relating to the Wollombi Brook Aboriginal Cultural Heritage Conservation Area, recording the obligations assumed by the Applicant under the conditions of this consent in relation to the conservation area, and register the agreement/s pursuant to section 69F of the National Parks and Wildlife Act 1974.	Conservation Agreement for Wollombi Brook Aboriginal Cultural Heritage Conservation Area dated 3 November 2022 Letter from DPE (S'ODonoghue) to Yancoal (G Mulhearn) titled Warkworth Continuation Project, SSD (6464) Security of the Wollombi Brook Aboriginal Cultural Heritage Area Independent Environmental Audit Report for Yancoal Mount Thorley Warkworth, Hansen Bailey, July 2020			On 14 July 2022, DPE approved the commencement of limited mining activity prior to the final executed agreements. The final Conservation Agreement was signed on November 3 2022. Assessed as compliant by 2020 audit	Complies	

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Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
S3 C40	Human Remains	This consent does not allow the Applicant to disturb any in-situ human remains on site.	Please confirm that no in-situ remains have been encountered or disturbed.	Environment and Community Manager – no in situ human remains encountered during the audit period			Complies	
S3 C41	Protection of Heritage Items	Applicant must protect the heritage items identified in Table 1 of Appendix 5.	Salvage Reports Care Agreement			Salvage reports and the Care Agreement have been sighted by the Auditor and confirm that MTW has managed indigenous heritage issues in accordance with the requirements of the management plan.	Complies	
S3 C42	Salvage	Prior to carrying out any development on site that could affect the heritage items identified in Table 2 of Appendix 5, the Applicant must salvage those items in accordance with the approved program under the Aboriginal Heritage Management Plan.	Mount Thorley Warkworth Aboriginal Heritage Management Plan 2020, Compliance Audit Inspection, Arrow Heritage Solutions dated February 2021 Mount Thorley Warkworth Aboriginal Heritage Management Plan 2021, Compliance Audit Inspection, Arrow Heritage Solutions West of Wallaby Scrub Road Aboriginal Scar Tree Removal Program, Arrow Heritage Solutions, January 2023			Arrow Heritage Solutions undertook compliance inspections in 2020, 2021, 2022 and noted that no unauthorised site disturbances or AHMP non compliances were observed during the site inspections. A further compliance inspection is planned for 2023. Arrow Heritage have also been retained to provide ongoing heritage advice to the project and were engaged to manage and supervise the removal of three Aboriginal Scarred trees. Arrow Heritage reported the scarred trees were removed from site with care and transported to the Mount Thorley Warkworth Cultural Heritage Facility at 1916 Putty Road, where they have been cleaned and curated. Once decisions have been made regarding their long term storage location, the trees will be transported to this site where they will be managed according to the desires of the Cultural Heritage Working Group	Complies	
S3 C43	Aboriginal Heritage Management Plan	The Applicant must prepare an Aboriginal Heritage Management Plan for the development to the satisfaction of the Planning Secretary and carry out the development in accordance with this plan. The plan must:	Aboriginal Heritage Management Plan Mt Thorley Warkworth SSD 6464 and 6465 dated 27 July 2022			Further review of the plan was undertaken during the audit period with the Department approving Revision 4 of the plan on the 12 th of August 2022.	Complies	
		a) be prepared in consultation with Heritage NSW and Aboriginal stakeholders. and submitted to the Planning Secretary for approval prior to carrying out any development under this consent;	Letter from DPE (J Fittell) to Warkworth Mining (G Mulhearn) titled "Aboriginal Heritage Management Plan for Mount Thorley Continuation Project (SSD 6465) and Warkworth Continuation Project (SSD 6464) dated 12 th August 2022			A summary of the consultation undertaken is provided in Section 2 of the plan. Detailed consultation records with Heritage NSW and Aboriginal Stakeholders are provided in Schedule 18. DPE approved Revision 4 of the Plan on the 12 th of August 2022	Complies	
		b) include a program to: <ul style="list-style-type: none"> salvage, investigate and/or manage Aboriginal sites and potential archaeological deposits within the project disturbance area; assess and remove scarred trees within the disturbance area; protect and monitor Aboriginal sites outside the project disturbance area; manage the discovery of any new Aboriginal objects or skeletal remains during the development; facilitate access to archaeological sites on site for Aboriginal stakeholders; and Aboriginal stakeholders are consulted and involved in the conservation and management of Aboriginal cultural heritage on the site. 	Aboriginal Heritage Management Plan Mt Thorley Warkworth SSD 6464 and 6465 dated 27 July 2022			The AHMP includes a program for the protection and where required salvage of heritage artifacts.	Complies	

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Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
S3 C43	Aboriginal Heritage Management Plan	c) Include a research program, that has been prepared by suitable qualified and experienced persons whose appointment has been approved by the Planning Secretary, for locating and evaluating sand bodies of likely early Pleistocene and early Holocene age that may contain evidence of Aboriginal habitation in the Upper Hunter Valley.	Aboriginal Heritage Management Plan Mt Thorley Warkworth SSD 6464 and 6465 dated 27 July 2022			The Hunter Valley Sand Bodies Research Program is referenced in Section 38 of the AHMP and is provided in Schedule 17 of that Plan.	Complies	
S3 C44	Mount Thorley Warkworth Historic Heritage Conservation Fund	The Applicant must establish and contribute \$500,000 under the Mount Thorley Warkworth Historic Heritage Conservation Fund in consultation with Council and the CHAG to the satisfaction of the Planning Secretary.	Partnering Agreement, Mount Thorley, Warkworth Historic Heritage Conservation Fund, Warkworth Mining Limited dated 21 February 2017 Mt Thorley, Warkworth Historic Heritage Fund, Income and Expenditure Statement (as at 31 March 2023) Letter from Singleton Council (A. Schaffer) to Yancoal titled "Annual Reporting Requirement 2022 – Mount Thorley Warkworth Historic Heritage Conservation Fund" dated 18 April 2023			The income and expenditure statement notes that a total of \$516, 321.46 has been paid to the conservation fund (adjusted for inflation) with \$106,844 paid in 2023	Complies	
S3 C45	Mount Thorley Warkworth Great Northern Road Conservation Fund	The Applicant must establish and contribute \$200,000 under the Mount Thorley Warkworth Great Northern Road Conservation Fund to be administered by the Applicant in consultation with Council, CHAG, Convict Trail Project and Heritage Branch, to the satisfaction of the Planning Secretary.	Independent Environmental Audit Report for Yancoal Mount Thorley Warkworth, Hansen Bailey, July 2020			Assessed as compliant by 2020 audit which noted that a total of \$203k had been paid to the Convict Trail Project	Complies	
S3 C46	Historic Heritage Management Plan	The Applicant must prepare a Historic Heritage Management Plan for the development to the satisfaction of the Planning Secretary, and carry out the development in accordance with this plan. This plan must:	Historic Heritage Management Plan, Mount Thorley, Warkworth, Revision 2 dated 12 August 2022 Letter from DPE (H.Reed) to Yancoal (A Speechly) titled "Mount Thorley Warkworth Operations (SSD 6464 and SSD 6465) Approval of Management Plans dated 11 October 2017 Letter from DPE (J Fittell) to Warkworth Mining (G Mulhearn) titled "Historic Heritage Management Plan for Mount Thorley Continuation Project (SSD 6465) and Warkworth Continuation Project (SSD 6464) dated 12 th August 2022			The Department approved the Management Plan on the 11 th of October 2017 noting the Department is satisfied they meet the relevant criteria under SSD 6464 and 6465. Further review of the plan was undertaken during the audit period with the Department approving Revision 2 of the plan on the 12 th of August 2022.	Complies	
		(a) be prepared by suitable qualified and experienced persons whose appointment has been endorsed by the Planning Secretary;	Historic Heritage Management Plan, Mount Thorley, Warkworth, Revision 2 dated 12 August 2022	Environment and Community Manager - The original HHMP was prepared by the appropriate personnel appointed by DPE in 2016 (Dr David Cameron and Joel Deacon). As this update was minor in nature, and the management measures agreed upon are unchanged from the originally approved HHMP, MTW environmental personnel prepared and submitted the updated HHMP for DPE approval. In addition, as the changes were minor, in correspondence with the submission it was requested that consultation with relevant parties is not required, with existing consultation already included in the HHMP.		The original (2017) HHMP was prepared by an expert who was approved by DPE on 14 November 2016. The current version of the plan does not identify the author. The plan was revised in 2022. No evidence was available to verify that the author of those changes was DPE approved, if any consultation was undertaken during the revision process or is DPE has reviewed and approved the current revision.	Complies	
		(b) be prepared in consultation with the Heritage Branch, Council, CHAG and local historical organisations;	Historic Heritage Management Plan, Mount Thorley, Warkworth, Revision 2 dated 12 August 2022		Complies			
(c) be submitted to the Planning Secretary for approval prior to carrying out any mining to the west of Wallaby Scrub Road;	Historic Heritage Management Plan, Mount Thorley, Warkworth, Revision 2 dated 12 August 2022	Complies						

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Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
S3 C46	Historic Heritage Management Plan	<p>(d) Include the following:</p> <ul style="list-style-type: none"> - conservation management plans for the former RAAF Base Bulga, Great Northern Road (Wallaby Scrub Road portion), Brick House and Springwood Homestead, and - a program/procedures for: <ul style="list-style-type: none"> - archaeological investigations of Wallaby Scrub Road, Well 2, and the former RAAF Base Bulga Complex; - photographic recording of all historic heritage sites within the disturbance areas prior to disturbance; - relocation and storage of moveable heritage items; - managing the discovery of any new heritage items during the development; - ongoing consultation and involvement of the relevant historical groups in the conservation and management of historic heritage on the site; - developing an interpretation programme of the heritage values of the RAAF Base Bulga Complex and the Great Northern Road Complex; - establishing the Mount Thorley Warkworth Historic Heritage Conservation Fund and the Mount Thorley Warkworth Great Northern Road Conservation Fund; and - protecting the other heritage items outside the disturbance area. <p>Note: It is accepted that the conservation Management plan for the Springwood Homestead and interpretation programme for the RAAF Base Bulga Complex and the Great Northern Road Complex will not be submitted with the initial Historic Heritage Management Plan. These should be progressively added to the plan once completed.</p>	Historic Heritage Management Plan, Mount Thorley, Warkworth, Revision 2 dated 12 August 2022			As above	Complies	
S3 C47	Transport Wallaby Scrub Road	<p>This consent allows open cut mining through the existing alignment of Wallaby Scrub Road.</p> <p>Note: the Applicant also required other related approvals in order to undertake mining within the existing road alignment including an approval under the Roads Act 1993 to close Wallaby Scrub Road. It also needs to obtain mining lease over the Road under the Mining Act 1992 for mining from surface to 20 metres depth.</p>	Independent Environmental Audit Report for Yancoal Mount Thorley Warkworth, Hansen Bailey, July 2020			Assessed as compliant by 2020 Audit which noted a portion of Wallaby Scrub Road was gazetted as closed by the Minister for Lands and Forestry on 7 September 2018, and subsequently purchased from Singleton Shire Council (SSC) on the same date (Section 4.4, 2018 AR). No Section 138 approval under the Roads Act 1993 was required as the parcel of land was no longer a road after the gazettal of road closure (GM pers comms).	Complies	
S3 C48	Intersections	<p>Unless the Planning Secretary agrees otherwise, the Applicant must:</p> <p>(a) close the intersection of Lydes Lane and the Golden Highway in consultation with Council and to the satisfaction of TfNSW, within 6 months of the date of this consent; and</p>	Please advise status of road closure and provide evidence of consultation with Council Independent Environmental Audit Report for Yancoal Mount Thorley Warkworth, Hansen Bailey, July 2020			Assessed as compliant by 2020 Audit which noted that Lydes Lane was physically closed in 2016 with appropriate consultation with Council and no objection from TfNSW.	Complies	
		<p>(b) pay the TfNSW\$375,000 towards the upgrade of the intersection of the Golden Highway (Putty Road) and Mitchel Line of Road within 12 months of the date of this consent.</p>	Independent Environmental Audit Report for Yancoal Mount Thorley Warkworth, Hansen Bailey, July 2020			Assessed as compliant by 2020 Audit which noted that payments were completed in 2017.	Complies	

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Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
S3 C49	Putty Road Crossing	If the Applicant decides to construct a third crossing of Putty Road between the Warkworth and Mount Thorley Mines, then this crossing must be constructed to the satisfaction of the RMS, and the Applicant must bear all the costs associated with the construction, maintenance and subsequent removal of this crossing during rehabilitation of the site.	Assessed as compliant by 2020 Audit.	Environment and Community Manager – all three crossings have been completed		Assessed as compliant by 2020 Audit. Construction activities were completed in 2018 including the Putty Road third crossing.	Complies	
S3 C50	Rural Fire Service - Emergency Access Track/Fire Trail	Prior to the closure of Wallaby Scrub Road, the Applicant must do the following in consultation with Council, RMS and the RFS: (a) develop a suitable emergency access track/fire trail to the west of the approved mining pit in general accordance with the indicative trail/track shown in Appendix 8, and ensure that this track/trail complies with the relevant standards in the RFS Planning for Bush Fire Protection publication and the Bushfire Coordinating Committees Fire Trails Policy No. 2/2007, or its latest version;	Independent Environmental Audit Report for Yancoal Mount Thorley Warkworth, Hansen Bailey, July 2020			Assessed as compliant by 2020 Audit.	Complies	
		(b) develop a protocol with RFS that: - provided for ongoing access and use of the new emergency access track/fire trail following the closure of Wallaby Scrub Road; - provides for access to the site during emergencies on site to assist with any emergency response; and - provides for the Applicant to use the emergency response equipment and appropriately trained personnel on site to assist the RFS (and any other emergency agencies) respond to emergencies in the surrounding area, to the satisfaction of the Planning Secretary. Following approval, the Applicant must carry out the development in accordance with this protocol.	Mount Thorley, Warkworth for Rural Fire Service Access Trail (Fire Trail (Watts Track)) Mount Thorley, Warkworth for Rural Fire Service Access Trail (Fire Trail (Watts Track)) Email from Yancoal (T. Bates) to RFS (K Hepplewhite) titled "RFS Access Protocol" dated September 7, 2018 Email from RFS (K Hepplewhite) Yancoal (T. Bates) to titled "RFS Access Protocol" dated September 7, 2018 Independent Environmental Audit Report for Yancoal Mount Thorley Warkworth, Hansen Bailey, July 2020			Assessed as compliant by 2020 Audit. The protocol was prepared in consultation with the Rural Fire Services ongoing consultation has been undertaken with RFS with the protocol updated in 2019.	Complies	
S3 C51	Monitoring of Coal Transport	The Applicant must: a) keep records of the amount of coal transported from the development in each calendar year; and	Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023			Table 4.1 of each Annual Review provides details of the amount of coal transported from the project (annually)	Complies	
		b) make these records available on its website at the end of each calendar year.	Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023			The 2020 and 2021 Annual Reviews are publicly available on the MTW website; however, the 2022 Annual Review was not on the website at the time of this IEA. Therefore, the coal transport records for 2022 were not publicly available as required by this Condition. The Auditor notes that the 2022 Annual Review had been submitted to DPE but had not yet been approved.	Non-compliant	Ensure that the coal transportation records are regularly updated.

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Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
S3 C52	Visual Operating Conditions	<p>The Applicant must:</p> <p>a) implement all reasonable and feasible measures to minimise the visual and off-site lighting impacts of the development, including lighting impacts on road users and impacts of mining voids;</p>	Mt Thorley Warkworth Lighting Review EMM 6 May 2020	<p>Environment and Community Manager – The following information was provided to DPE 24 May 2023 in response to an RFI in May 2023:</p> <ul style="list-style-type: none"> o Progressive rehabilitation is used to minimise visual impact; o MTW uses vegetated bunds, vegetative screening, and screen fencing along the boundary of the site including adjoining public roads; o A lighting assessment review was completed most recently in May 2020 by EMM Consulting, for the purpose of reviewing lighting measures implemented at the site to ensure that their implementation is compliant with the relevant conditions of the approvals. The assessment included field lux measurements and qualitative assessment. The lighting review found that operations at MTW meet the approval requirements. The review found that “no improvements are currently required to address lighting impacts from any of the assessment locations assessed as part of this lighting review. Nonetheless, it is recommended that temporary lighting plant be inspected to ensure that all lighting is directed below the horizontal, where safe to do so.” o MTW’s operational procedures include consideration of lighting impacts from mobile lighting plant to minimise lighting impact to neighbours when setting up the lighting plant. In addition to consideration when setting up lighting plant, MTW utilises inspections from Community Response Officers around the boundary of operations at or just after dusk to attempt to identify any lighting plant that has potential to be intrusive, and feed directly back to operations to request and review lighting plant changes when considered appropriate. o For community lighting complaints, MTW’s complaint response process utilises MTW’s Community Response Officers to respond by inspecting the relevant area, discussing with community members, and feeding back directly to operations to request and review lighting plant changes when considered appropriate. 		<p>Environmental induction covers lighting. The Lighting review undertaken in 2020 confirms the offsite lighting impacts were meeting the requirements of this condition. However, 94 lighting complaints were received during the audit period. A review of the complaints indicates that the community impacts are from relocatable lighting and mobile plant, but that fixed lighting is not generating complaints. As part of the internal complaint investigations, CROs assess mobile lighting and arrange changes in light locations or direction and that the actions, in general resolve the issues. It is apparent that there is insufficient planning for the location and use of mobile lighting and therefore all reasonable and feasible mitigation measures have not been used.</p>	Non-compliant	<p>Ensure that personnel responsible for planning and / or managing night works undertake proactive planning for all after hours works. The planning should identify the optimal lighting setup for those activities and that the implementation of the lighting plans be checked prior to undertaking those activities by CROs or other appropriately trained personnel.</p>
		<p>b) establish and maintain vegetated bunds, vegetative screening and/or screen fencing along the boundary of the site including adjoining public roads where appropriate;</p>			<p>During the site inspection vegetated visual screening was observed from the major access roads to the site.</p>	<p>Visual screening has been maintained.</p>	Complies	

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Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
S3 C52	Visual Operating Conditions	c) ensure that all external lighting associated with the development complies with Australian Standard AS4282 (/NT) 1997 - Control of Obtrusive Effects of Outdoor Lighting, or its latest version; and	Mt Thorley Warkworth Lighting Review EMM 6 May 2020 MTW Environmental Monitoring Report, - Night Shift 13 August 2020 MTW Environmental Monitoring Report, - Night Shift 7 August 2021 Environmental Management at Yancoal MTW – New Starters Presentation 2022, 8 June 2023	Refer to Condition a) above.		Environmental induction covers lighting. The Lighting review undertaken in 2020 confirms the offsite lighting impacts was meeting the requirements of this condition. However, 90 lighting complaints were received during the audit period. A review of the complaints indicates that the community impacts are from relocatable lighting and mobile plant, but that fixed lighting is not generating complaints. As part of the internal complaint investigations, CROs assess mobile lighting and arrange changes in light locations or direction and that the actions, in general resolve the issues. It is apparent that there is insufficient planning for the location and use of mobile lighting and therefore all reasonable and feasible mitigation measures have not been used.	Non-compliant	Ensure that personnel responsible for planning and / or managing night works undertake proactive planning for all after hours works. The planning should identify the optimal lighting setup for those activities and that the implementation of the lighting plans be checked prior to undertaking those activities by CROs or other appropriately trained personnel.
		d) monitor and report on the effectiveness of these measures.	Mt Thorley Warkworth Lighting Review EMM 6 May 2020 MTW Environmental Monitoring Report, - Night Shift 13 August 2020 MTW Environmental Monitoring Report, - Night Shift 7 August 2021			The effectiveness of lighting controls is monitored through routine night shift inspection undertaken by the Community Relations Officer and is reported in each Annual Review (Section 6.6 – amenity and lighting)	Complies	
		e) Initial works to establish the vegetative bunds and/or screening referred to in condition 30(b) must be undertaken within 6 months of the date of commencement of development under this consent (unless otherwise agreed by the Planning Secretary), in accordance with a tree screening plan that has been prepared in consultation with Council and to the satisfaction of the Planning Secretary. The use of screen fencing must be limited to areas where vegetative screening is not feasible, or as an interim measure prior to establishment of vegetation.	Independent Environmental Audit Report for Yancoal Mount Thorley Warkworth, Hansen Bailey, July 2020			Assessed as Not Triggered by the previous audit as it was required prior to the audit period. Vegetation bunds/screening in condition 30(b) are illustrated on page 2 of the Rehab and Visual Screening Presentation provided by MTW during the IEA. The initial works began in 2016 with a shade cloth fitted to security fences from Dragline Crossing to Wallaby Scrub Road intersection. A Stage 1 bund was also constructed along a section of Putty Road. The 2017 audit sighted consultation with Singleton Council. No evidence that the Tree Screening Plan was prepared to the satisfaction of the Secretary.	Not Triggered	
S3 C53	Additional Visual Impact Mitigation	Upon receiving a written request from the owner of any residence on privately-owned land who has, or would have, significant direct views of the mining operations from this residence and/or its associated facilities (such as pool or barbeque area) during the development. the Applicant must implement additional visual mitigation measures (such as landscaping or vegetation screens) on the land in consultation with the landowner. These measures must be reasonable and feasible, and directed towards reducing the visibility of mining operations from the residence and/or its associated facilities. If within 3 months of receiving this request from the owner, the Applicant and the owner cannot agree on the measures to be implemented, or there is a dispute about the implementation of these measures, then either party may refer the matter to the Planning Secretary for resolution.		Environmental and Community Manager – no requests for addition visual impact mitigation has been received during the audit period.		No requests for addition visual impact mitigation have been received during the audit period.	No Triggered	

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Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
S3 C54	Bushfire Management	<p>The Applicant must:</p> <p>a) ensure that the development is suitably equipped to respond to any fires on site; and</p>	Mount Thorley, Warkworth Bushfire Management Plan, Prepared by Emergency Services Officer, dated 17 September 2019			<p>The Bushfire Management Plan notes the following equipment is available on site which can be used for combating bushfires:</p> <ul style="list-style-type: none"> ISUZU FTO 800 2& 4 wheel drive firefighting appliance with a water capacity of 200 Litres and 120 litres of firefighting foam Water carts with waster capacity up to 2000 litres and 120 litres of firefighting foam D11 Dozers and graders to be used for the preparation of fire breaks Portable fire extinguishers, fire depots, and fire suppression throughout the mine infrastructure 	Complies	
		<p>b) assist the Rural Fire Service and emergency services as much as practicable if there is a fire in the vicinity of the site.</p>	Have there been any bushfires on site during this audit period?	Environment and Community Manager – No bushfires were experienced during the audit period.		No bushfires were experienced during the audit period.	Not Triggered	
S3 C55	Waste	<p>The Applicant must:</p> <p>a) implement all reasonable and feasible measures to minimise the waste (including coal rejects) generated by the development;</p>	<p>Waste Management Plan Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023</p>	<p>Environment and Community Manager – Production processes and CHPP aim to maximise coal recovery, and record strong yield performance, thereby minimizing coal reject. For general wastes – MTW has prepared an Internal Waste Management Plan and the Induction and training programs cover recycling and waste management.</p>	Facilities for the collection and segregation of wastes are provided at all maintenance and administrative areas. Photograph 6 -Waste Storage Area.	Facilities are provided across the site for the collections and segregation of wastes.	Complies	
		<p>b) ensure that the waste generated by the development is appropriately stored, handled and disposed of; and</p>	Waste Management Records		Facilities for the collection and segregation of wastes are provided at all maintenance and administrative areas.	Wastes are collected, segregated and stored appropriately on-site. Wastes are collected for off-site recycling or disposal by a waste contractor. Details of waste collection and disposal were sighted by the Auditor.	Complies	
		<p>c) monitor and report on effectiveness of the waste minimisation and management measures in the Annual Review.</p>	<p>Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023</p>	Environment and Community Manager – Waste reporting is covered in the Annual Review.		Routine reporting of waste management activities is included in the annual reviews.	Complies	

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Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
	Rehabilitation Objectives	The Applicant must rehabilitate the site in accordance with the provisions under the Mining Act 1992 and must be generally consistent with the proposed rehabilitation strategy described in the EIS (and depicted conceptually in the figure in Appendix 6) and comply with the objectives in Table 13.	Ecological Monitoring reports for Rehab areas for 2021 (Emergent Ecology/Dendra Systems) and 2022 (Emergent Ecology/Mosaic Ecology).	Environment and Community Manager - Rehabilitation Management Plan on website, which includes Forward Program and Rehabilitation Objectives. Interviews with rehabilitation staff were undertaken by the ecologists during site visit on 26 April 2023.	Parts of rehabilitation areas were inspected by the Ecologists on 26 April 2023.	Weed control is a significant management issue for the rehabilitation areas and the wider Hunter Valley, particularly following favourable weather conditions during the La Niña phase in 2020 – 2022. While current weed management controls are generally acceptable and in accordance with key guidelines, achieving long term performance and long-term completion criteria may require more intensive control actions. Ecological reports reviewed by the ecology specialists detailed the findings of monitoring in rehab areas. While some criteria are meeting relevant targets, further works, particularly in areas in early phases of treatment, are required to meet long term targets to establish self-sustaining ecosystems	Complies	<p>Recommendations to achieve targets, as detailed in the Ecological monitoring reports, include:</p> <ul style="list-style-type: none"> • More intensive weed control of High Threat Weeds; • Control of overly dominant natives (e.g Corymbia maculate, Acacia species) via thinning or changes to seed mix; and • Improved distribution of ground habitat features (such as logs);
S3 C56	Table 13	Feature	Objective					
		Mine site (as a whole)	<ul style="list-style-type: none"> • Safe, stable and non-polluting • Materials (including topsoils, substrates and seeds of the disturbed areas) are recovered, appropriately managed and used effectively as resources in the rehabilitation of the site • Final landforms to: o sustain the intended land use for the post-mining domains; o be designed to minimise the visual impacts of the development; o be in keeping with the natural terrain features of the area; o be integrated with the rehabilitated landforms of surrounding mines; o backfill the gap between the two main emplacements in accordance with the dozer (and dragline) option shown on the applicable figure in Appendix 6; o incorporate micro-relief; and o incorporate drainage lines consistent with topography and natural drainage where reasonable and feasible 					
		Water Quality	<ul style="list-style-type: none"> • Water retained on site is fit for the intended land use(s) for the post-mining domains • Water discharged from site is consistent with the baseline ecological, hydrological and geomorphic conditions of the creeks prior to mining disturbance • Water management is consistent with the applicable regional catchment strategy 					
		Final Voids	<ul style="list-style-type: none"> • Designed as long term groundwater sinks and to maximise groundwater flows across back-filled pits to the final void • Minimise: o the size and depth of final voids o the drainage catchment of final voids o any high wall instability risk • risk of flood interaction for all flood events up to and including the 1% AEP 					
		Biodiversity	<ul style="list-style-type: none"> • Restore ecosystem function, including maintaining or establishing self-sustaining ecosystems comprising local plant species • Vegetation to be established, with the restoration of at least 1,617 hectares of Central Hunter Grey Box – Ironbark Woodland EEC • Size, location and species of native tree lots and corridors are established to sustain biodiversity habitats • Species are selected that re-establishes and complements regional and local biodiversity 					
		Surface Infrastructure	<ul style="list-style-type: none"> • To be decommissioned and removed, unless the Resources Regulator agrees otherwise 					
		Agriculture	<ul style="list-style-type: none"> • Land capability classification for the relevant nominated agricultural pursuit for each domain is established and self-sustaining within 5 years of land use establishment (first planting vegetation) 					
		Community	<ul style="list-style-type: none"> • Ensure public safety • Minimise the adverse socio-economic effects associated with mine closure 					

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Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations	
S3 C57	Progressive Rehabilitation	The Applicant must 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 must be employed when areas prone to dust generation cannot yet be permanently rehabilitated.	Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023			Annual Review reports detail progress of mine rehabilitation progress against MOP plans. The net rehabilitation progress (i.e. rehabilitation minus rehabilitation disturbance) for the 2015 – 2021 period was 20.4 ha higher than targets. A total of 47.9ha of new rehabilitation was completed during 2022 against a Mining Operations Plan 2022 target of 35ha. 2022 annual report notes that rehabilitation and disturbance forecasts submitted to Resources Regulator (submitted in August 2022) are based on financial year periods and therefore don't align with the calendar year Annual Review reporting period and the misalignment is intended to be corrected in the Forward Program to be submitted in May 2023.	Non-compliant	Increase the rate of progressive rehabilitation works with the objective of meeting the established progressive rehabilitation targets.	
S3 C58	Rehabilitation Management Plan	The Applicant must prepare a Rehabilitation Management Plan for the development to the satisfaction of the Resources Regulator. and carry out the development in accordance with this plan. The plan must:	Rehabilitation Management Plan, Revision 1, dated 28 July 2022.			The Rehabilitation Management Plan has been prepared.	Complies		
		a) be prepared in consultation with the Department, NOW, BCD and Council and the CCC;	Rehabilitation Management Plan, Revision 1, dated 28 July 2022.			Section 4.2 of the plan details the consultation undertaken on past and the current version of the plan.	Complies		
		b) be prepared in accordance with any relevant Resources Regulator guideline, including any NSW government policy regarding voids;	Rehabilitation Management Plan, Revision 1, dated 28 July 2022.	Environment and Community Manager – the latest version of the RMP was prepared in accordance with the Resource Regulator's Form and Way Document.			The latest version of the RMP was prepared in accordance with the Resource Regulator's Form and Way Document.	Complies	
		c) be submitted to the Resources Regulator for approval prior to carrying out any development under this consent;	Rehabilitation Management Plan, Revision 1, dated 28 July 2022.				Submitted via email and via spatial data portal. Review by Resources Regulator remains in progress. Correspondence with RR was sighted by the Auditor	Complies	
		d) Describe how the rehabilitation of the site would be integrated with the implementation of the biodiversity offset strategy;	Rehabilitation Management Plan, Revision 1, dated 28 July 2022.				The RMP does not address the integration of the mine site rehabilitation with the biodiversity off-set strategy.	Non-compliant	Review and revise the plan to include the integration of the mine site rehabilitation with the biodiversity off-set strategy.
		e) include detailed performance and completion criteria for evaluating the performance of the rehabilitation of the site, and triggering remedial action (if necessary);	Rehabilitation Management Plan, Revision 1, dated 28 July 2022.				Section 4 of the RMP describes the performance and completion criteria.	Complies	
		f) describe the measures that would be implemented to ensure compliance with the relevant conditions of this consent, and address all aspects of rehabilitation including timeframes for achieving specified rehabilitation objectives;	Rehabilitation Management Plan, Revision 1, dated 28 July 2022.				Rehabilitation implementation is discussed in Section 6 of the RMP. Section 7 describes the rehabilitation quality control processes; Section 8 describes the monitoring program and Section 10 describes the intervention and adaptative management processes.	Complies	
		g) includes a mine closure strategy, that details measures to minimise the long term impacts associated with mine closure, including final landform. final land use and socioeconomic issues;	Rehabilitation Management Plan, Revision 1, dated 28 July 2022.				Section 5 of the plan describes the final landforms and rehabilitation plan	Complies	

Project Approval SSD 6464 Warkworth Continuation Project (Mod 2)								
Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
S3 C58	Rehabilitation Management Plan	h) include interim rehabilitation where necessary to minimise the area exposed for dust generation;	Rehabilitation Management Plan, Revision 1, dated 28 July 2022.			The RMP does not address the interim rehabilitation of the site to minimise dust generation.	Non-compliant	Review and revise the plan to include the interim rehabilitation of the site to minimise dust generation.
		i) include a program to monitor, independently audit and report on the effectiveness of the measures, and progress against the detailed performance and completion criteria; and	Rehabilitation Management Plan, Revision 1, dated 28 July 2022.			Section 6 of the RMP describes the rehabilitation quality control processes and Section 8 describes the monitoring program.	Complies	
		j) build to the maximum extent practicable on the other management plans required under this consent.	Rehabilitation Management Plan, Revision 1, dated 28 July 2022.				Noted	
S4 C1	Notifications of Landowners / tenants	<p>Within 1 month of the date of this consent, the Applicant must:</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 Applicant to acquire their land in accordance with the procedures in conditions 5-6 below at any stage during the development; any residence on the land listed in Table 3 of schedule 3 that they have the right to request the Applicant to ask for additional noise mitigation measures to be installed at their residence at any stage during the development; and any privately-owned land within 2 kilometres of the approved open cut mining pits that they are entitled to ask for an inspection to establish the baseline condition of any buildings or structures on their land, or to have a previous property inspection report updated; 	<p>Independent Environmental Audit Report for Yancoal Mount Thorley Warkworth, Hansen Bailey, July 2020</p> <p>MTW 2017 Independent Environmental Audit, 2017 Independent Audit Report, Jacobs, 8 August 2018</p>			Assessed as compliant by the 2020 and 2017 Audits.	Complies	
		b) notify the tenants of any mine-owned land of their rights under this consent (see condition 18 of schedule 3); and				Assessed as compliant by the 2020 and 2017 Audits.	Complies	
		c) send a copy of the NSW Health fact sheet entitled "Mine Dust and You" (as may be updated from time to time) to the owners and/or existing tenants of any land (including mine-owned land) where the predictions in the EIS identify that dust emissions generated by the development are likely to be greater than the relevant air quality criteria in schedule 3 at any time during the life of the development.				Assessed as compliant by the 2020 and 2017 Audits.	Complies	

Project Approval SSD 6464 Warkworth Continuation Project (Mod 2)								
Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
S4 C2	Notifications of Landowners / tenants	<p>Prior to entering into any tenancy agreement for any land owned by the Applicant that is predicted to experience exceedances of the recommended dust and/or noise criteria, or for any of the land listed in Table 1 that is subsequently purchased by the Applicant, the Applicant must:</p> <p>a) advise the prospective tenants of the potential health and amenity impacts associated with living on the land, and give them a copy of the NSW Health fact sheet entitled "Mine Dust and You" (as may be updated from time to time); and</p>	<p>Residential Tenancy Agreement, 1 Wambo Road dated 3 September 2021</p> <p>Residential Tenancy Agreement, 1/1946 Putty Road, 27 February 2023</p>			<p>Residential tenancy agreements were entered into for a number of properties during the audit period. MTW provided those tenants with copies of the NSW Health fact sheet entitled "Mine Dust and You"</p>	Complies	
		<p>b) advise the prospective tenants of the rights they would have under this consent, to the satisfaction of the Planning Secretary.</p>	<p>Residential Tenancy Agreement, 1 Wambo Road dated 3 September 2021</p> <p>Residential Tenancy Agreement, 1/1946 Putty Road, 27 February 2023</p>			<p>Residential tenancy agreements were entered into for a number of properties during the audit period. MTW provided those tenants with information on their rights under the Consent.</p>	Complies	
S4 C3	Notifications of Landowners / tenants	<p>As soon as practicable after obtaining monitoring results showing:</p> <p>a) an exceedance of any relevant criteria in schedule 3, the Applicant must notify affected landowners in writing of the exceedance, and provide regular monitoring results to each affected landowner until the development is again complying with the relevant criteria; and</p>	<p>Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021</p> <p>Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022</p> <p>Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023</p>			<p>There were noise exceedances recorded during the routine monthly monitoring within the audit period.</p>	Not Triggered	
		<p>b) an exceedance of the relevant air quality criteria in schedule 3, the Applicant must send a copy of the NSW Health fact sheet entitled "Mine Dust and You" (as may be updated from time to time) to the affected landowners and/or existing tenants of the land (including the tenants of any mine-owned land).</p>	<p>Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021</p> <p>Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022</p> <p>Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023</p>			<p>There were dust exceedances recorded during the routine monthly monitoring within the audit period.</p>	Not Triggered	

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Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
S4 C4	Independent Reviews	If an owner of privately-owned land considers the development to be exceeding the criteria in schedule 3 at his/her land, then he/she may ask the Planning Secretary in writing for an independent review of the impacts of the development on his/her land.	Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023	Environment and Community Manager – No independent Reviews were requested during the audit period.		No independent Reviews were requested during the audit period.	Not Triggered	
		If the Planning Secretary is satisfied that an independent review is warranted, then the Applicant must: a) commission a suitably qualified, experienced and independent expert, whose appointment has been approved by the Planning Secretary, to: • consult with the landowner to determine his/her concerns; • conduct monitoring to determine whether the development is complying with the relevant impact assessment criteria in schedule 3; and • if the development is not complying with these criteria then: o determine if the more than one mine is responsible for the exceedance, and if so the relative share of each mine regarding the impact on the land; o identify the measures that could be implemented to ensure compliance with the relevant criteria; and	Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023	Environment and Community Manager – No independent Reviews were requested during the audit period.		No independent Reviews were requested during the audit period.	Not Triggered	
		b) give the Planning Secretary and landowner a copy of the independent review within 2 months of the Planning Secretary's decision, unless the Planning Secretary agrees otherwise.	Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023	Environment and Community Manager – No independent Reviews were requested during the audit period.		No independent Reviews were requested during the audit period.	Not Triggered	

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Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
S4 C5	LAND ACQUISITION	<p>Within 3 months of receiving a written request from a landowner with acquisition rights, the Applicant must make a binding written offer to the landowner based on:</p> <p>a) the current market value of the landowner's interest in the land at the date of this written request, as if the land was unaffected by the development, having regard to the:</p> <ul style="list-style-type: none"> 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 noise mitigation measures in condition 3 of schedule 3; 		Environment and Community Manager – No independent acquisitions for SDD 6464 requested during the audit period.		No independent acquisitions for SDD 6464 requested during the audit period.	Not Triggered	
		<p>b) the reasonable costs associated with:</p> <ul style="list-style-type: none"> relocating within the Muswellbrook, Singleton or Cessnock local government area, or to any other local government area determined by the Planning Secretary; and obtaining legal advice and expert advice for determining the acquisition price of the land, and the terms upon which it is to be acquired; and 		Environment and Community Manager – No independent acquisitions for SDD 6464 requested during the audit period.		No independent acquisitions for SDD 6464 requested during the audit period.	Not Triggered	
		<p>c) reasonable compensation for any disturbance caused by the land acquisition process.</p>		Environment and Community Manager – No independent acquisitions for SDD 6464 requested during the audit period.		No independent acquisitions for SDD 6464 requested during the audit period.	Not Triggered	
		<p>However, if at the end of this period, the Applicant and landowner cannot agree on the acquisition price of the land and/or the terms upon which the land is to be acquired, then either party may refer the matter to the Planning Secretary for resolution.</p>		Environment and Community Manager – No independent acquisitions for SDD 6464 requested during the audit period.		No independent acquisitions for SDD 6464 requested during the audit period.	Not Triggered	
S4 C6	Land Acquisition	The Applicant must pay all reasonable costs associated with the land acquisition process described in condition 5 above, including the costs associated with obtaining Council approval for any plan of subdivision (where permissible), and registration of this plan at the Office of the Registrar-General.		Environment and Community Manager – No independent acquisitions for SDD 6464 requested during the audit period.		No independent acquisitions for SDD 6464 requested during the audit period.	Not Triggered	

Project Approval SSD 6464 Warkworth Continuation Project (Mod 2)								
Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
S5 C1	Environmental Management Strategy	The Applicant must prepare an Environmental Management Strategy for the development to the satisfaction of the Planning Secretary, and carry out the development in accordance with this strategy. The strategy must:	Environmental Management Strategy, Mt Thorley Warkworth, Revision 2.1 dated 28/7/2022 Letter from DPE (M S Prott) to Warkworth Mining (G. Mulhearn) titled "Mount Thorley Continuation Project (SSD 6465) Warkworth Continuation Project (SSD 6464) Environmental Management Strategy" dated 20 July 2021			The strategy provides a suitable strategic framework for the environmental management of the development and was approved by the Planning Secretary on the 20 July 2021.	Complies	
		a) be submitted to the Planning Secretary for approval prior to carrying out any development under this consent;						
		b) provide the strategic framework for environmental management of the development;	Environmental Management Strategy, Mt Thorley Warkworth, Revision 2.1 dated 28/7/2022			Section 5 and Table 1 summarize the Statutory Approvals for the Development	Complies	
		c) identify the statutory approvals that apply to the development;	Environmental Management Strategy, Mt Thorley Warkworth, Revision 2.1 dated 28/7/2022			Section 6.2 summarises the roles and responsibilities of key roles for the implementation of the EMS	Complies	
		d) describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the development;	Environmental Management Strategy, Mt Thorley Warkworth, Revision 2.1 dated 28/7/2022			Sections 6.3- 6.6 of the Plan includes Information relating to: - Information dissemination - The role of the Community Consultative Committee - Provision of information via the project website - Community Complaints Management - Dispute Resolution - Emergencies	Complies	
		e) describe the procedures that would be implemented to: • keep the local community and relevant agencies informed about the operation and environmental performance of the mine development; • receive, handle, respond to, and record complaints; • resolve any disputes that may arise; • respond to any non-compliance; • respond to emergencies; and	Environmental Management Strategy, Mt Thorley Warkworth, Revision 2.1 dated 28/7/2022			Appendix C of the Strategy includes the approved Plans, strategies and programs that are required by both SSD 6464 and SSD 6465 with a reference to the MTW website. Including: - Noise Management Plan - Blast Management Plan - Water Management Plan - Aboriginal Heritage Management Plan - Wollombi Brook Aboriginal Cultural Heritage Area Conservation Area Plan of Management - Historic Heritage Management Plan - Rehabilitation Management Plan - Biodiversity Management Plan - Pollution Incident Response Management Plan	Complies	
f) include: • copies of any strategies, plans and programs approved under the conditions of this consent; and • a clear plan depicting all the monitoring required to be carried out under the conditions of this consent.	Environmental Management Strategy, Mt Thorley Warkworth, Revision 2.1 dated 28/7/2022			Appendix E includes details of all plans related to the Environmental Strategy and as required by the SSD. Appendix B provides details of all monitoring to be undertaken as part of the	Complies			

Project Approval SSD 6464 Warkworth Continuation Project (Mod 2)								
Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
S5 C2	Adaptive Management	The Applicant must assess and manage development-related risks to ensure that there are no exceedances of the criteria and/or performance measures in schedule 3. Any exceedance of these criteria and/or performance measures constitutes a breach of this consent and may be subject to penalty or offence provisions under the EP&A Act or EP&A Regulation.					Noted	
		Where any exceedance of these criteria and/or performance measures has occurred, the Applicant must, at the earliest opportunity: a) take all reasonable and feasible steps to ensure that the exceedance ceases and does not recur;	Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023			Examples of Adaptive Management Actions taken during the audit period: • noise exceedance – new handheld monitor purchased and tool developed to enable identification of low frequency noise for supplementary noise readings. • -blast exceedance – review of property ownership information to identify residences on privately owned land, and then update of Blast Management Plan to reflect this.	Complies	
		b) consider all reasonable and feasible options for remediation (where relevant) and submit a report to the Department describing those options and any preferred remediation measures or other course of action; and	Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023			• -water management – refer DPE correspondence folder regarding Action Plan for MTO sediment basin at various dates in the audit period, which is intended to divert rehabilitation runoff through a sediment basin and then offsite.	Complies	
		c) implement remediation measures as directed by the Planning Secretary.		Environment and Community Manager - No directions issued by DPE for remedial actions during the audit period.		No directions issued by DPE for remedial actions during the audit period.	Not Triggered	

Project Approval SSD 6464 Warkworth Continuation Project (Mod 2)									
Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations	
S5 C3	Management Plan Requirements	The Applicant must ensure that the management plans required under this consent are prepared in accordance with any relevant guidelines, and include: a) detailed baseline data;	Environmental Management Plans including: - Environmental Management Strategy - Air Quality Management Plan - Water Management Plan - Blast Management Plan - Social Impact Management Plan			Baseline data is provided in Section 4 of the various management plans (Existing Character) where applicable	Complies		
		b) a description of: • the relevant statutory requirements (including any relevant approval, licence or lease conditions); • any relevant limits or performance measures/criteria; • the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the development or any management measures;		- Pollution Incident Response Management Plan - Rehabilitation Management Plan - Biodiversity Management Plans (various)			The management plans include the relevant statutory/ approval requirements as well as criteria to be achieved	Complies	
		c) a description of the measures that would be implemented to comply with the relevant statutory requirements, limits, or performance measures/criteria;		- Aboriginal Heritage Management plan - Historic Heritage Management Plan			The management plans include details of management and mitigation options.	Complies	
		d) a program to monitor and report on the: • impacts and environmental performance of the development; • effectiveness of any management measures (see c above);					The management plans include monitoring programs to evaluate the effectiveness of any management measures.	Complies	
		e) a contingency plan to manage any unpredicted impacts and their consequences;				The management plans include monitoring programs to evaluate the effectiveness of any management measures and contingency planning.	Complies		
		f) a program to investigate and implement ways to improve the environmental performance of the development over time;	Environmental Management Strategy, Mt Thorley Warkworth, Revision 2.1 dated 28/7/2022			Adaptive management process is provided in the EMS.	Complies		
		g) protocol for managing and reporting any: • incidents; • complaints; • non-compliances with statutory requirements; and • exceedances of the impact assessment criteria and/or performance criteria; and	Environmental Management Strategy, Mt Thorley Warkworth, Revision 2.1 dated 28/7/2022			Various sections of the Environmental Management Strategy describe the relevant processes as follows: - Incidents (Section 7.5) - Complaints (Section 6.5) - Non compliances (Section 7.4) - Exceedences (Section XX)	Complies		
		h) a protocol for periodic review of the plan.	Environmental Management Strategy, Mt Thorley Warkworth, Revision 2.1 dated 28/7/2022			Section 8 of the Environmental Management Strategy describes the process for Review of the Environmental Management Strategy as well as any other subordinate strategies, plans and programs described by the development consents.	Complies		

Project Approval SSD 6464 Warkworth Continuation Project (Mod 2)								
Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
S5 C4	Annual Review	By the end of March each year, the Applicant must review the environmental performance of the development for the previous calendar year to the satisfaction of the Planning Secretary. This review must:	<p>Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021</p> <p>Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022</p> <p>Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023</p> <p>2019 - Letter from Yancoal (G.Mulhearn) to DPE (Ann Hagerthy) titled " Mt Thorley Warkworth SSD 6464 and SSD Annual Review Report" dated 31 March 2020</p> <p>Letter from DPE (H.Watters) to Yancoal Australasia (G. Mulhearn) titled " Mt Thorley Warkworth Complex – SSD 6464 (Continuation Project) and SSD 6465 (Mount Thorley Continuation Project) Annual Review 2019 dated 17 June 2020</p> <p>2020 - DPE Post Approval form reference Schedule 5 Condition 4 dated 29 April 2021</p> <p>Letter from DPE (H.Watters) to Yancoal Australasia (G. Mulhearn) titled " Mt Thorley Warkworth SSD 6464 and SSD Annual Review 2020 dated 2 November 2021</p> <p>2021 - Email from DPE (Major Projects) to Yancoal (G. Mulhearn), 6 April 2022</p> <p>Letter from DPE (H. Watters) to Yancoal (G. MULhearn) titled " Warkworth Continuation (SSD -6464) and Mt Thorley Continuation (SSD-6465) 2021 Annual Review – Request for Additional Information" dated 20, June 2022</p> <p>Letter from DPE (H. Watters) titled "Warkworth Continuation – 2021 Annual Review (SSD – 6464)" dated 10 October 2022</p> <p>2022 - Letter from Yancoal (G.Mulhearn) to DPE (H.Watters) titled "Mt Thorley Warkworth Complex (SSD-6464 and SSD – 6465) Annual Review Report</p> <p>Letter from DPE (H. Watters) to Yancoal (G. MULhearn) titled "Warkworth Continuation – Extension Request – 2022 Annual Review (SSD 6464) Extension of Time to Type of Request" dated 28 March 2023</p>			<p>2019 Annual Review</p> <ul style="list-style-type: none"> lodged with DPE on the 31 March 2020 endorsed by DPE on the 17 June 2020 <p>2020 Annual Review</p> <ul style="list-style-type: none"> lodged with DPE on the 29 April 2021 endorsed by DPE on the 2nd of November 2021 An extension of time was granted by DPE to lodge the Annual Review by 31st of April 2021 <p>2021 Annual Review</p> <ul style="list-style-type: none"> lodged with DPE on the 31 March 2022 DPE requested additional information on 20 June 2022 endorsed by DPE on the 10 October 2022 <p>2022 Annual Review</p> <ul style="list-style-type: none"> Extension of time requested on 27 March 2023 to lodge AR on 1 May 2023 Approval for extension of time to 1 May 2023 granted by DPE Lodged with DPE on 1 May 2023 DPE advised on 2 May 2023 of their commencement of their detailed assessment Annual review is yet to be endorsed by DPE 	Complies	

Project Approval SSD 6464 Warkworth Continuation Project (Mod 2)								
Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
S5 C4	Annual Review	<p>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>Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021</p> <p>Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022</p> <p>Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023</p>			<p>Section 4 of each Annual Review summarises the following activities undertaken during the audit period:</p> <ul style="list-style-type: none"> • Mining activities • Mineral Processing • Production statistics • Summary of changes (development and equipment upgrades) <p>Section 7 and Appendix 8 of each Annual Review provides a comprehensive summary of rehabilitation activities undertaken</p>	Complies	
		<p>b) include a comprehensive review of the monitoring results and complaints records of the development over the past year, which includes a comparison of these results against the:</p> <ul style="list-style-type: none"> • relevant statutory requirements, limits or performance measures/criteria; • monitoring results of previous years; and • relevant predictions in the EIS; 	<p>Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021</p> <p>Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022</p> <p>Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023</p>			<p>Section 6 of each Annual Review provides a comprehensive review of the monitoring results, including meteorological data, noise, blasting, air quality, water, and waste. Section 8 of each Annual Review provides a summary of complaints, communications, and community engagement activities.</p> <p>A comparison against the predictions in the EA are made for noise and dust (refer to Tables 6.5 (noise) and 6.7 (dust). Surface water monitoring results are assessed against trigger limits</p>	Complies	
		<p>c) identify any non-compliance over the last year, and describe what actions were (or are being) taken to ensure compliance;</p>	<p>Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021</p> <p>Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022</p> <p>Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023</p>			<p>Section 10 of each Annual Review provides details of incidents and noncompliance as well as activities to be completed in the next year</p>	Complies	
		<p>d) identify any trends in the monitoring data over the life of the development;</p>	<p>Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021</p> <p>Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022</p> <p>Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023</p>			<p>Long term monitoring trends are graphically presented in figures throughout the document.</p>	Complies	
		<p>e) identify any discrepancies between the predicted and actual impacts of the development, and analyse the potential cause of any significant discrepancies; and</p>	<p>Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021</p> <p>Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022</p> <p>Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023</p>			<p>Section 6 of each Annual Review provides a comprehensive review of the monitoring results, including meteorological data, noise, blasting, air quality, water and waste. Section 8 of each Annual Review provides a summary of complaints, communications and community engagement activities.</p> <p>A comparison against the predictions in the EA are made for noise and dust (refer to Tables 6.5 (noise) and 6.7 (dust). Surface water monitoring results are assessed against trigger limits</p>	Complies	
		<p>f) describe what measures will be implemented over the next year to improve the environmental performance of the development.</p>	<p>Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021</p> <p>Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022</p> <p>Mt Thorley, Warkworth 2021 Annual Review, 1 May 2023</p>			<p>Section 11 provides details of actions to be completed over the next reporting period to improve the environmental performance</p>	Complies	

Project Approval SSD 6464 Warkworth Continuation Project (Mod 2)								
Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
S5 C5	Revision of Strategies, Plans and Programs	Within 3 months of:						
		a) the submission of an: <ul style="list-style-type: none"> • annual review under condition 4 above; • incident report under condition 7 below; • audit report under condition 9 below; or 	Environmental Management Plans Review Register 2020			Detailed registers of document reviews are maintained by Yancoal to plan and track document reviews.	Complies	
		b) any modification to the conditions of this consent (unless the conditions require otherwise), or	Environmental Management Plans Review Register 2021 Environmental Management Plans Review Register 2022			This includes the review due date, review completion date, designated reviewer and revision due date.	Complies	
		c) the introduction of any NSW government policy regarding voids, the Applicant must review, and if necessary revise, the strategies, plans, and programs required under this consent to the satisfaction of the Planning Secretary.					Complies	
		d) Where this review leads to revisions in any such document, then within 4 weeks of the review, unless the Planning Secretary agrees otherwise, the revised document must be submitted to the Planning Secretary for approval.	Letter from Yancoal (G.Mulhearn) to DPE (M Sprott) titled "Mount Thorley Warkworth updated Water Management Plan" dated 20 December 2019 Letter from DPE (M Sprott) to Yancoal (G Mulhearn) titled "Mount Thorley Water Management Plan, dated 13 May 2020 Letter from DPE (J Fittell) to Yancoal (G.Mulhearn) titled "Mt Thorley Continuation Project (SSD -6465) and Warkworth Continuation Project SSD (6464) dated 8 August 2022			Examples were provided which confirmed DPE had reviewed and approved management plans during the audit period	Complies	
S5 C6	Community Consultative Committee	The Applicant must operate a Community Consultative Committee (CCC) for the development to the satisfaction of the Planning Secretary. This CCC must be operated in accordance with the Guidelines for Establishing and Operating Community Consultative Committees for Mining Projects (Department of Planning, 2007, or its latest version). It may also be combined with any CCC for the Warkworth mine.	MTW Website Community - MOUNT THORLEY WARKWORTH COAL OPERATIONS LIMITED (mtwcoal.com.au)			The current Mount Thorley Warkworth Community consultative committee comprises an independent chair, the MTW General Manager, Environment Manager, Singleton Shire Council , Singleton Shire Healthy Environment Group and members of the local community. A copy of the CCC guidelines are provided on the MTW website along with the minutes of CCC meetings from 2016 - 2023	Complies	

Project Approval SSD 6464 Warkworth Continuation Project (Mod 2)										
Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations		
S5 C7	Reporting	The Applicant must immediately notify the Planning Secretary and any other relevant agencies of any incident. Within 7 days of the date of the incident, the Applicant must provide the Planning Secretary and any relevant agencies with a detailed report on the incident, and such further reports as may be requested.	Reportable Incident Correspondence – all incidents were reported within the timeframes specified in the Approval or as directed by DPE.	The following incidents have been notified to the Planning Secretary relating to the Warkworth Operations					Complies	
				Date	DPE Notification Date	Other Agencies Notification	DPE Report date	Incident Type		
				4/1/21	4/1/21	4/1/21	29/1/21	Water Discharge		
				19/3/21	19/3/21	19/3/21	29/3/21	Water discharge		
				11/1/21	11/11/21	11/11/21	18/11/21	Water discharge		
				26/11/21	26/11/21	26/11/21	3/12/21	Water discharge		
				24/2/23	24/2/22	3/2/22	3/2/22	Blast overpressure		
				7/3/23	7/3/23	7/3/23	14/3/22	Water discharge		
				26/3/22	26/3/22	1/4/22	1/4/22	Water discharge		
				6/4/22	6/4/22	-	14/4/22	Noise exceedance		
				3/7/22	3/7/22	3/7/22	12/7/22	Water discharge		
				20/7/22	21/7/23	-	28/7/22	Noise exceedance		
				14/9/22	15/9/22	-	21/9/22	Noise Exceedance		
				8/10/22	8/10/22	8/10/22	14/10/22	Water Discharge		
S5 C8	Regular Reporting	The Applicant must provide regular reporting on the environmental performance of the development on its website, in accordance with the reporting arrangements in any plans or programs approved under the conditions of this consent.	MTW Website Mount Thorley Warkworth Coal (mtwcoal.com.au)			The MTW website includes monthly environmental monitoring reports as well as real time data for air quality, noise and complaints.	Complies			

S5 C9	Independent Environmental Audit	Within 1 year of the commencement of development under this consent. and every 3 years thereafter, unless the Planning Secretary directs otherwise, the Applicant must commission and pay the full cost of an Independent Environmental Audit of the development. This audit must:	<p>Independent Environmental Audit Report for Yancoal Mount Thorley Warkworth, Hansen Bailey, July 2020</p> <p>Mt Thorley Warkworth Complex (SSD-6464 and SSD -6465) Independent Audit 2020 – Responses to Audit Recommendations</p> <p>MTW 2017 Independent Environmental Audit, 2017 Independent Audit Report, Jacobs, 8 August 2018</p> <p>Response to Non – Compliances and Recommendations MTW IEA 2017 (Rev C)</p> <p>2016 Independent Environmental Audit, Mt Thorley and Warkworth Operations, Peter Horn, 12 May 2016</p>			<p>Independent audits were undertaken in 2016, 2017, 2020 and 2023 (this audit)</p> <p>The 2023 audit has been undertaken within 3 years of the previous (2020 audit)</p>	Complies	
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Project Approval SSD 6464 Warkworth Continuation Project (Mod 2)								
Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
		a) be conducted by a suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Planning Secretary;	Independent Environmental Audit Report for Yancoal Mount Thorley Warkworth, Hansen Bailey, July 2020 Letter from DPE (H. Watters) to Yancoal (G. Mulhearn) titled "Mt Thorley Warkworth Complex (SSD 6464 and SSD 6465) – 2020 Independent Environmental Audit" dated 24 February 2020			The previous audit was undertaken by Hansen Bailey, the audit team, were approved by DPE on the 24 February 2020	Complies	
		b) include consultation with the relevant agencies;	Independent Environmental Audit Report for Yancoal Mount Thorley Warkworth, Hansen Bailey, July 2020			Agency consultation is summarized in Section 3.3 with full records of consultation provided in Appendix A	Complies	
		c) assess the environmental performance of the development and assess whether it is complying with the requirements in this consent and any relevant EPL or Mining Lease (including any assessment, plan or program required under these approvals);	Independent Environmental Audit Report for Yancoal Mount Thorley Warkworth, Hansen Bailey, July 2020			Section 6 of the audit report provides details of non-compliances with the project conditions of consent including the EPL and the mining lease	Complies	
		d) include an assessment - undertaken by an independent expert whose appointment has been endorsed by BCD - of the progress towards implementation of the biodiversity offset strategy in particular the regeneration of the Warkworth Sands Woodland against the detailed performance and completion criteria under the Biodiversity Management Plan (see condition 36 of schedule 3);	Letter from DPE (H.Watters) to Yancoal (G.Mulhearn) titled "Mt Thorley Warkworth Complex (SSD 6464 and 6465)- 2020 Independent Environmental Audit dated 24 February 2020			WSP are the nominated ecologist and were endorsed by DPE. The assessment undertaken to address this condition is included in Appendix F of the 2020 IEA.	Complies	
		e) review the adequacy of strategies, plans or programs required under the abovementioned approvals; and	Independent Environmental Audit Report for Yancoal Mount Thorley Warkworth, Hansen Bailey, July 2020			Section 4 and Appendix E of the 2020 IEA address this requirement	Complies	
		f) recommend appropriate measures or actions to improve the environmental performance of the development, and/or any assessment, plan or program required under the above-mentioned approvals.	Independent Environmental Audit Report for Yancoal Mount Thorley Warkworth, Hansen Bailey, July 2020			Section 7 (Table 8) of the 2020 independent environmental audit provides a series of recommendations aimed at improving the environmental performance.	Complies	
S5 C10	Independent Environmental Audit	Within 6 weeks of the completion of this audit, unless the Planning Secretary agrees otherwise. the Applicant must submit a copy of the audit report to the Planning Secretary, together with its response to any recommendations contained in the audit report.	Letter from DPE (H. Watters) to Yancoal (G.Mulhearn) titled "Mt Thorley Warkworth Complex (SSD 6464 and SSD 6465) 2020 Independent Environmental Audit" dated 16 June 2020 Letter from DPE (H. Watters) to Yancoal (G. Mulhearn) titled " Mount Thorley and Warkworth Complex (SSD 6464 and SSD – 6465) Independent Environmental Audit dated 10 July 2020			DPE granted an extension of time for the submission of the 2020 audit report to the 17 July 2020.	Complies	

Project Approval SSD 6464 Warkworth Continuation Project (Mod 2)								
Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
S5 C11	ACCESS TO INFORMATION	<p>From the commencement of development under this consent, the Applicant must:</p> <p>(a) make the following information publicly available on its website:</p> <ul style="list-style-type: none"> • the EIS; • current statutory approvals for the development; • current statutory approvals for the development; • approved strategies, plans or programs required under the conditions of this consent; • a comprehensive summary of the compliance monitoring results of the development, reported in accordance with the specifications in any conditions of this consent, or any approved plans and programs; • the results of real time noise monitoring, updated daily (unless otherwise agreed by the Planning Secretary); • a complaints register, which is to be updated monthly; • minutes of CCC meetings; • the last five annual reviews of the development (for the last 5 years, if applicable); • any independent environmental audit; and the Applicant's response to the recommendations in any audit; • any other matter required by the Planning Secretary; and <p>(b) keep this information up to date;</p>	<p>Mount Thorley Warkworth Coal (mtwcoal.com.au)</p>			<p>The website includes the following documents:</p> <ul style="list-style-type: none"> • Environmental Impact Assessment • Project Modifications • Environmental Management Strategy and Plans including: <ul style="list-style-type: none"> ○ Environmental Management Strategy ○ Air Quality Management ○ Noise Management ○ Waste Management ○ Blast Management ○ Pollution Incident Response Management ○ Rehabilitation ○ Biodiversity ○ Indigenous and Cultural Heritage • Statutory Approvals including: <ul style="list-style-type: none"> ○ SSD 6465 Mt Thorley Continuation Development Consent ○ EPL 1976 Mount Thorley Operations Pty Ltd ○ EPBC 2009/5081 ○ EPBC 2002/629 • Monthly environmental monitoring reports that include annual complaints register • Community consultative committee meeting minutes • Annual Review reports dated from 2016 to 2022. The 2022 AR was not loaded onto the website as it had not been approved by DPE. • Independent Audits and response to audit findings for years 2016 to 2020 	Complies	

Compliance Register SSD 6465 Mt Thorley

Appendix A2

Project Approval SSD 6465 Mt Thorley

Cond	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
S2 C1	Obligation to Minimise Harm to the Environment	In addition to meeting the specific performance criteria established under this consent, the Applicant must implement all reasonable and feasible measures to prevent and/or minimise any material harm to the environment that may result from the construction, operation, or rehabilitation of the development.	Documents as noted below			Although there have been incidents and non-compliances with the conditions of approval, it was observed during the site inspection and through interviews and site observations made during the audit that the measures implemented on site were reasonable and feasible with appropriate corrective actions implemented in the event of incidents and non-compliances.	Complies	
S2 C2	Terms of Consent	The Applicant must carry out the development: <ul style="list-style-type: none"> a. generally, in accordance with the EIS and 				Based on the observations made during the site inspection, review of management plans, monitoring data and other records, it may be reasonably concluded that the Development is being undertaken generally in accordance with the EIS. An appropriate level of resourcing has been applied to manage compliance with the Development Consent	Complies	
		<ul style="list-style-type: none"> b. in accordance with the conditions of this consent 				There have been some instances where the condition of this consent has not been complied with, therefore compliance with this condition has not been achieved. Refer to individual conditions below.	Noted	
S2 C3	Terms of Consent	If there is any inconsistency between the above documents, the most recent document must prevail to the extent of the inconsistency. However, the conditions of this approval must prevail to the extent of any inconsistency.					Noted	
S2 C4	Terms of Consent	The Applicant must comply with any reasonable requirement/s of the Planning Secretary arising from: <ul style="list-style-type: none"> a) any reports, strategies, plans, programs, reviews, audits or correspondence that are submitted in accordance with this consent; 	Letter from Yancoal (G.Mulhearn) to DPE (A Hagerthy) titled "Warkworth Mining Limited (SSD 64-64)- Blast Event (N39-BF8-MD1). DPE Ref SSD- 6464-PA-37" dated 3 March 2022 Letter from DPE (H.Watters) to Yancoal (G.Mulhearn) titled "Warkworth Continuation (SSD-6464)- Blast Exceedence 24 February 2022			DPE directed Yancoal to update and resubmit the Blast Management Plan to DPE for review following the blasting incident report submitted to the Department on the 3 March 2022. The revised BMP was submitted to DPE on the 20 th of January 2022 and approved on the 24 th of March 2023/	Complies	
		<ul style="list-style-type: none"> b) any reports, reviews or audits commissioned by the Department regarding compliance that are submitted in accordance with this consent; 		Environment and Community Manager – no reports, reviews or audits were commissioned by the Department			Not triggered	
		<ul style="list-style-type: none"> c) the implementation of any actions or measures contained in these documents. 				The Auditor has reviewed correspondence between MTW and DPE and found that MTW has responded to directions issued by DPE during this audit period	Complies	
S2 C5	Limits on Consent Mining Operations	The Applicant may carry out mining operations on site for 21 years from the date of commencement of development under this consent.	Noted				Noted	

Project Approval SSD 6465 Mt Thorley

Cond	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
S2 C6	Coal Extraction	The Applicant must not extract more than 10 million tonnes of ROM coal from the Mt Thorley mine in a calendar year.	Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023		Photograph 7 Mt Thorley Open Cut Mine.	Table 4.1 of each Annual Review documents the following tonnages of ROM coal extracted: <ul style="list-style-type: none"> • 2020 – 0.88 • 2021 – 0.43 • 2022 – 0.13 The recorded tonnages are less than the maximum tonnage prescribed by this condition, therefore compliant.	Complies	
S2 C7	Coal Transport	The Applicant Must: a) not transport any coal produced at the development by public road; and	Records (extract) of coal transport quantities of audit period.		No coal was observed to be exported from the site by public road during the audit inspection.	No evidence was found that coal is exported from the site, other than by rail.	Complies	
S2 C7	Coal Transport	a) ensure that the coal produced on site is only sent to Mt Thorley Coal Loader for transport by rail to export and/or domestic markets	Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023		No coal was observed to be exported from the site during the audit inspection. All coal was transported internally by truck to the Coal Loader for export by train.	No evidence was found that coal is exported from the site, other than by rail.	Complies	
S2 C8	Commencement of Development Under This Consent	The Applicant must: a) notify the Planning Secretary in writing of the date of commencement of development under this consent; and	MTW Independent Environmental Audit 2017 Independent Audit Report Jacobs, 8 th of August 2018			Assessed as compliant by the 2017 audit. Notification was made to the Department on the 16 th of February 2016 with the date of commencement on the 15 th of February 2015	Complies	
		a) may only commence development under this consent once the Planning Secretary has agreed in writing that all prerequisites to the commencement of development under this consent have been met.	MTW Independent Environmental Audit 2017 Independent Audit Report, Jacobs, 8 th of August 2018			Assessed as compliant by the 2017 audit. DPE letter dated 8 th February 2016 notifying MTW that all required documentation was in place.	Complies	
S2 C9	Surrender of Existing Development Consent	By the end of January 2017, unless the Planning Secretary agrees otherwise, the Applicant must surrender the existing development consent (DA-34/95) for the Mt Thorley mine in accordance with Section 104A of the EP&A Act. Following the commencement of development under this consent, the conditions of this consent shall prevail to the extent of any inconsistency with the conditions of DA-34/95.	Independent Environmental Audit Report for Yancoal Mt Thorley Warkworth, Hansen Bailey, July 2020 Letter from DPE (H Reed) to Yancoal (M.Lloyd) titled "Surrender of Warkworth (DA 300-9-2002-i) Mt Thorley (DA 34/95) and other historical consents Letter from Yancoal (G.Mulhearn) to DPE (H.Reed) titled "Development Consent" Mt Thorley Operations Pty Ltd" dated 4 June 2019			On the 11 th of October 2017 DPE granted an extension of time for the surrender of the development consent till the end of January 2019. Yancoal wrote to DPE on the 4 June 2019 requesting surrender of the historic development consents. On 13 June 2019, DPE surrendered development consents DA 34/95 as well as historical development consents dated 5 March 1991 and 12 January 1983. DPE advised in their letter that the consent was surrendered to meet the intent of this condition on 13 June 2019, which is prior to the audit period.	Complies	

Project Approval SSD 6465 Mt Thorley

Cond	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
S2 C10	Structural Adequacy	The Applicant must 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 and SA NSW.	<p>Acrocert Construction Certificate – Notice of Determination number 2022-0781 dated 30 November 2022 (In Pit Offices)</p> <p>Acrocert Complying Development – Notice of Determination number 2022-0132 dated 30 November 2022 (Communications Tower)</p> <p>Acrocert Construction Certificate – Notice of Determination number 2022-0534 dated 7 December 2022 (New Workshop)</p>	<p>Environment and Community Manager - The following facilities were constructed during this audit period:</p> <ul style="list-style-type: none"> LTE Tower (Certificate of Compliance) MTW North Workshop 		<p>AcroCert have been appointed as the independent certifier have provided construction certificates and certificates of compliance for the following buildings</p> <ul style="list-style-type: none"> LTE Tower (Certificate of Compliance) MTW North Workshop <p>Each of the Certificates notes the BCA Classification</p>	Complies	
S2 C11	Demolition	The applicant must ensure that all demolition work on site is carried out in accordance with AS 2601-2001: The Demolition of Structures, or its latest version.		Environment and Community Manager – no demolition works were undertaken during the audit period.		No demolition works were undertaken during the audit period.	Not Triggered	
S2 C12	Protection of Public Infrastructure	Unless the Applicant and the applicable authority agree otherwise, the Applicant must:		Environment and Community Manager – no damage to public road associated with any MTW works occurred during the audit period.		No damage to public road associated with any MTW works occurred during the audit period.	Not Triggered	
		a) repair, or pay the full costs associated with repairing, any public infrastructure that is damaged by the development; and		Environment and Community Manager – no damage to public road associated with any MTW works occurred during the audit period.		No damage to public road associated with any MTW works occurred during the audit period.	Not Triggered	
S2 C13	Operation of Plant and Equipment	The Applicant must ensure that all plant and equipment used on site, or to monitor the performance of the development, is maintained and operated in a proper and efficient manner	Plant and Equipment maintenance records.	Maintenance Manager demonstrated the operation of the mine Maintenance Management System. The system provides a framework for the management of routine maintenance and the identification and rectification of plant and equipment issues.	Designated equipment maintenance areas were inspected. Complex management systems and equipment are implemented to plan and record routine servicing and unplanned maintenance for items of plant, including coal trucks, drill rigs etc.	Designated equipment maintenance areas were inspected. Complex management systems and equipment are implemented to plan and record routine servicing and unplanned maintenance for items of plant, including coal trucks, drill rigs etc. The maintenance management system implemented at the mine are designed to ensure the efficient operation of plant and equipment were comprehensive	Complies	
S2 C14	Updating & Staging of Strategies, Plans and Programs	With the approval of the Planning Secretary, the Applicant may:	Has this condition been triggered during this audit period? If yes please provide relevant DPE correspondence.	Environment and Community Manager – MTW submits management plans as required during the audit period.			Noted	
		b) submit any strategy, plan or program required by this consent on a progressive basis; and		Environment and Community Manager – MTW submits management plans as required during the audit period.			Noted	
		c) combine any strategy, plan or program required by this consent with any similar strategy, plan or program required for the Warkworth mine.						

Project Approval SSD 6465 Mt Thorley

Cond	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
		<p>To ensure these strategies, plans or programs are updated on a regular basis, the Applicant may at any time submit revised strategies, plans or programs to the Planning Secretary for approval. With the agreement of the Planning Secretary, the Applicant may prepare any revised strategy, plan or program without undertaking consultation with all parties under the applicable condition of this consent.</p> <p>Notes:</p> <ul style="list-style-type: none"> • While any strategy, plan or program may be submitted on a progressive basis, the Applicant will need to ensure that the existing operations on site are covered by suitable strategies, plans or programs at all times. • If the submission of any strategy, plan or program is to be staged, then the relevant strategy, plan or program must clearly describe the specific stage to which the strategy, plan or program applies, the relationship of this stage to any future stages, and the trigger for updating the strategy, plan or program. 	<p>Letter from DPE (J. Fittell) to Warkworth Mining Limited (G Mulhearn) titled "Approval of Warkworth Continuation Project Blast Management Plan" dated 24 March 2023</p>			<p>During the audit period, a number of management plans were reviewed and updated, including (but not limited to) the Environmental Strategy, Noise Management Plan and the various biodiversity management plans.</p> <p>In their letter of approval for the Blast Management Plan dated 24 March 2023, DPE agreed that in accordance with Condition 14 of Schedule 2, that consultation with each of the relevant parties listed in Condition 16 of Schedule 3 is not required given the administrative updates.</p>	Complies	
S2 C15	Community Enhancement Program	<p>Within 6 months of the date of this consent, unless the Planning Secretary agrees otherwise, the Applicant must enter into a VPA with Council in accordance with:</p> <p>a) Division 6 of Part 4 of the EP&A Act; and</p>	<p>Independent Environmental Audit Report for Yancoal Mt Thorley Warkworth, Hansen Bailey, July 2020</p> <p>Agenda, Mt Thorley Warkworth Voluntary Planning Agreement Community Meeting, 1 June 2023</p>			Assessed as compliant in the 2020 audit	Complies	
		<p>b) the terms of Applicant's offer in its letter to the Department dated 4 May 2015</p>	<p>Minutes, Mt Thorley Warkworth Voluntary Planning Agreement Community Meeting, 9 February 2023</p>			Assessed as compliant in the 2020 audit	Complies	
		<p>The VPA must include provisions for the payment, collections, management and distribution of the contributions under the agreement, with a focus on funding community infrastructure and services in the area surrounding, including Bulga Village.</p>	<p>Agenda, Mt Thorley Warkworth Voluntary Planning Agreement Community Meeting, 9 February 2023</p> <p>Minutes, Mt Thorley Warkworth Voluntary Planning Agreement Community Meeting, 3 November 2022</p>			Assessed as compliant in the 2020 audit	Complies	
		<p><i>Note: The Applicant's offer comprises a total contribution of \$11 million over 21 years for both the development and the Warkworth Continuation Project (SSD-6464).</i></p>	<p>VPA: Warkworth and Mt Thorley Continuation Proects, financial statement as at 31 December 2022</p>			Assessed as compliant in the 2020 audit	Complies	

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Cond	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations			
S3 C1	Acquisition on Request	Upon receiving a written request for acquisition from the owner of the land listed in Table 1, the Applicant shall acquire the land in accordance with the procedures in conditions 5 and 6 of schedule 4.	<p>Letter from Spark Helmore Lawyers (A McKelvey) to Yancoal (N Cook) titled "Exercise of acquisition rights under Mount Thorley Continuation Project Development Consent (SSD -6465) Property Loders Hill, 887 Putty Road, Mount Thorley (Lot 40 in DP 1147419) dated 12 October 2022</p> <p>Letter from TEW Advisor titled "Lot 5 DP 10022 (Receptor K) Asset Situated Proximate to Mount Thorley Operations Pty Ltd 2015 Continuation Project Development Consent SSD 6465 (Development Consent) dated 21 December 2022</p>	<p>Environment and Community Manager - Written acquisition requests have been received for two properties:</p> <p>Property K – Recluse - Lot 5 DP 10022 Putty Road Bulga</p> <ul style="list-style-type: none"> AUR Request letter dated 21 December 2022. Offer tabled 7 March 2023 (Costello Group on behalf of MTO and Robert Tew valuer on behalf of Recluse Pty Ltd) Offer is made with respect to (a) - (c) Negotiations remain open and are ongoing between MTO and Recluse. <p>Property 149 – Hedley – 887 Putty Road Mount Thorley</p> <ul style="list-style-type: none"> AUR Request letter dated 12/10/22 Offer tabled 27 February 2023. During the 3 months there was dialogue between MTO (via Costello Group) and Hedley together with dialogue between MTO (via Minter Ellison lawyers) to Sparke Helmore lawyers (on behalf of Hedley) In the ongoing discussions with Hedley since there has been no issues raised in regard to the timing of any offer. Negotiations remain open and are ongoing between MTO and Hedley. <p>Neither property is in dispute</p>		<p>Yancoal have been approached by the owners of two properties identified in Table 1. These are:</p> <ul style="list-style-type: none"> Property 149(Noise) Property K (Air) <p>Notices were issued in late 2022. The acquisition process will take some time, discussions with both property owners are ongoing. As such these properties are yet to be acquired by Yancoal. Neither acquisitions are in dispute.</p>	Complies				
									Table 1	Acquisition Basis	Land
										Noise	144, 146, 149, 915
		Air	K								
S3 C2	Noise Criteria	From 1 January 2017, except for the land in Table 1, the Applicant must ensure that the noise generated by the Development does not exceed the noise criteria in Table 3 at any residence on privately owned land.	<p>Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021</p> <p>Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022</p> <p>Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023</p>			<p>Section 6.2.2/3 of each Annual Review presents the results of the noise monthly noise monitoring undertaken by independent consultants.</p> <p>A summary of compliance is as follows:</p> <ul style="list-style-type: none"> 2020 – no non compliances reported 2021 - no non compliances reported 2022 – no exceedances of the noise criteria were recorded. 	Complies				

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Cond	Title	Condition	Documents Reviewed	Interviews	Audit Inspections		Assessment	Finding	Recommendations
S3 C2	Table 3	<i>Location</i>	<i>Land</i>	<i>Day (LAeq (15min))</i>	<i>Evening (LAeq (15min))</i>	<i>Night (LAeq (15min))</i>	<i>Night (LA1(1min))</i>		
		<i>Bulga</i>	75	40	40	40	50		
			42, 53, 55, 56, 58, 60, 62, 63, 64, 66, 71, 72, 73, 82, 210, 211, 236, 252, 920	39	39	39	49		
			16, 187, 19, 21, 24, 31, 35, 36, 37, 40, 41, 44, 45, 46, 47, 48, 49, 50, 52, 54, 61, 67, 70, 74, 80, 84, 89, 215, 234, 235, 237, 238, 243, 254, 903, 917, 918, 919, 921, 929	38	38	38	48		
			18, 20, 22, 23, 26, 28, 38, 39, 230, 231, 253, 921, 922	37	37	37	47		
			412, 14, 125, 226, 227, 228, 229, 909, 928, 936	36	36	36	46		
			All other residences on private land	35	35	35	45		
		<i>Mibrodale</i>	111	37	37	37	47		
			All other residences on private land						
		<i>Warkworth</i>	All other residences on private land						
		<i>Maison Dieu</i>	All other residences on private land						
		<i>Gouldsville, Long Point</i>	126, 262	38	38	38	48		
			All other residences on private land	35	35	35	45		
		<i>Hambleton Hill / Wyles Flat</i>	All other residences on private land	35	35	35	45		
		<i>Mt Thorley</i>	148	39	39	39	49		
			190	38	38	38	48		
	150	37	37	37	47				
	All other residences on private land	35	35	35	45				
S3 C3	Additional Mitigation on Request	Upon receiving a written request from the owner of any residence on the land listed in Table 1 or Table 2, the Applicant must implement additional noise and /or air quality mitigation measures at or in the vicinity of the residence in consultation with the landowner. These measures must be consistent with the measures outlined in the Voluntary Land Acquisition and Mitigation Policy. They must also be reasonable and feasible and proportionate with the level of predicted impact.	Mitigation Management spreadsheet, September 2020				There were no written requests for mitigation during the audit period. A spreadsheet of mitigations has been developed that includes the measures that have been implemented including contact details as well as measures implemented at each property including air conditioning systems and solar systems.	Complies	
		If within 3 months of receiving this request from the owner, the Applicant and the Owner cannot agree in the measures to be implemented, or there is a dispute about the implementation of these measures, then either party may refer to matter to the planning secretary for resolution.		Environment and Community Manager – there have been no property related disputes during this audit period.			There have been no disputes referred to the Planning Secretary for Resolution.	Not Triggered	
	Table 3	<i>Mitigation Basis</i>	<i>Characterisation of Impact</i>	<i>Land</i>					
	Noise	Moderate	148, 190						

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Cond	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations	
S3 C4	Operating Conditions Noise	<p>The Applicant must:</p> <p>a) implement all reasonable and feasible measures to minimise the operational, low frequency and road noise of the development;</p>	<p>Noise Management Plan, Mt Thorley Warkworth, Rev 5.2 dated 8 August 2022</p> <p>Thearle Engineering, Sound Power Determination, Mobile Machinery CAT D10T2 Dozer, Serial Number RAB01006 Ful Sound Kit, 25 June 2021</p> <p>Thearle Engineering, Sound Power Determination, Mobile Machinery CAT D10T2 Dozer, Serial Number KSN00309 Ful Sound Kit, 25 June 2021</p> <p>Caterpillar MD 6250 Unit 231, Sound Power Assessment, Westrac Pty Ltd Global Acoustics 7 May 2023</p> <p>Hitachi EH5000-AC3 Mount Thorley Warkworth, Sound Power by sound pressure level assessment, Hitachi Construction Machinery (Australia) Pty Ltd, 16 April 2020</p>		<p>Operating mining plant was observed during the site inspection.</p>	<p>As observed during the site inspection several mitigation measures have been implemented on site including noise attenuation on items of plant and equipment, no reversing beepers used (non-tonal reversing alarms instead), regular service inspections and site induction. Noise testing of items of plant and equipment including Dozers, Drills, Trucks, water carts are undertaken by a specialist consultant with records kept by the project team. In addition, a comprehensive noise monitoring and complaints management system has been implemented.</p>	Complies		
		<p>b) operate a comprehensive noise management system on suite 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 consent;</p>	<p>Noise Management Plan, Mt Thorley Warkworth, Rev 5.2 dated 8 August 2022</p> <p>Complaints Register</p>	<p>Environment and Community Manager- A noise enhancement report is generated each night indicating predictive noise enhancement for the coming night shift.</p> <p>The Community Response Officers' work instructions includes a review of the noise enhancement report.</p>		<p>6.3.5 of the Noise Management Plan describes the proactive noise mitigation processes implemented my MTW. "An assessment of (weather) forecast information at the commencement of each night shift identifies likely direction of meteorological enhancement of noise (if any). MTW has developed a simple noise enhancement prediction tool that uses WRF forecast data to predict source to receptor sonic gradients for the key noise propagation pathways from MTW to nearby sensitive receptors.</p> <p>Handheld noise monitoring is undertaken on a proactive basis in neighbouring communities on a night-to-night basis, as well as in response to triggers and complaints".</p> <p>The Auditor sighted complaints records that demonstrated that this system was operating.</p>	Complies		
		<p>c) minimise the noise impacts of the development during meteorological conditions when the noise limits in this consent do not apply (see Appendix 7); and</p>	<p>Noise Management Plan, Mt Thorley Warkworth, Rev 5.2 dated 8 August 2022</p> <p>Complaints Register</p>	<p>Environment and Community Manager- A noise enhancement report is generated each night indicating predictive noise enhancement for the coming night shift.</p> <p>The Community Response Officers' work instructions includes a review of the noise enhancement report.</p>				Complies	
		<p>d) ensure that;</p> <ul style="list-style-type: none"> all new trucks, dozers, drills and excavators purchased for use on the site after the date of this consent are commissioned as noise suppressed (or attenuated) units; and the existing fleet of trucks, dozers, drills and excavators on site at the date of this approval is progressively fitted with suitable noise attenuation packages to ensure that 100% of the fleet being used on site is attenuated by the end of 2016; and 	<p>Thearle Engineering, Sound Power Determination, Mobile Machinery CAT D10T2 Dozer, Serial Number RAB01006 Ful Sound Kit, 25 June 2021</p> <p>Thearle Engineering, Sound Power Determination, Mobile Machinery CAT D10T2 Dozer, Serial Number KSN00309 Ful Sound Kit, 25 June 2021</p> <p>Caterpillar MD 6250 Unit 231, Sound Power Assessment, Westrac Pty Ltd Global Acoustics 7 May 2023</p> <p>Hitachi EH5000-AC3 Mount Thorley Warkworth, Sound Power by sound pressure level assessment, Hitachi Construction Machinery (Australia) Pty Ltd, 16 April 2020</p>	<p>Environment and Community Manager – All HME was fitted with noise attenuation by the end of 2016</p> <p>All new HME is required to have noise attenuation fitted as part of the contract to purchase the equipment</p>	<p>Examples of noise attenuation on items of plant and equipment were observed during the site inspection</p>	<p>Appropriate noise attenuation measures were installed on plant and equipment with testing undertaken to ensure ongoing compliance.</p>	Complies		

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Cond	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
S3 C4	Operating Conditions Noise	e) carry out regular monitoring to determine whether the development is complying with the relevant conditions of this consent and, if necessary, adjust the scale of operations on site to meet the criteria in this consent	Insite Yancoal Australia			A comprehensive network of noise monitors has been established with monitoring results reported on the MTW website (Insite). The website provides details of any operational changes made due to excessive noise.	Complies	
S3 C5	Noise Management Plan	The Applicant must prepare a Noise Management Plan for the development to the satisfaction of the Planning Secretary and carry out the development in accordance with this plan.	Letter from Yancoal (G. Mulhearn) to EPA (N Ryan) titled "Yancoal, Mt Thorley Warkworth EPA Consultation on Noise, Air Quality Blasting and Water Management Plan" dated 18 July 2018 Letter from EPA (N Ryan) to Yancoal (G Mulhearn) titled Environment Protection Licences 1376 and 1976 Environmental Management Plans" dated 19 July 2018			During the audit period, the NMP was updated with version 5.2 of the NMP approved by DPE on the 8 th of August 2022. 2022 Annual Review prepared by MTW reported a non-compliance against this condition due to exceedances of noise criteria during that audit period. However, it is noted that this should have been recorded against condition S3 C2.	Complies	
		The plan must:	Independent Environmental Audit Report for Yancoal Mount Thorley Warkworth, Hansen Bailey, July 2020			The noise management plan was issued to EPA on 18 th July 2018 for consultation. The EPA did not provide any comments, noting it is not their role to review such plans. Appendix C of the NMP includes the correspondence with the EPA. 2020 Audit viewed the Secretary's Approval of the Plan dated 28 August 2018	Complies	
		a) be prepared in consultation with the EPA, and submitted to the Planning Secretary for approval prior to the commencement of any development under this consent;	Noise Management Plan, Mt Thorley Warkworth, Rev 5.2 dated 8 August 2022			Section 6 of the NMP	Complies	
		b) describe the measures that would be implemented to ensure compliance with the relevant noise criteria and operating conditions of this consent;	Noise Management Plan, Mt Thorley Warkworth, Rev 5.2 dated 8 August 2022			Section 8.1.3 of the NMP	Complies	
		d) include provisions for keeping the local community informed about the operation of the noise management system and monitoring programs (including any correction factors under the NSW Industrial Noise Policy), including regular briefings and a public information session within 6 months of granting this development consent;	Noise Management Plan, Mt Thorley Warkworth, Rev 5.2 dated 8 August 2022			Appendix A of the NMP	Complies	
		e) include a noise monitoring program that: <ul style="list-style-type: none"> •evaluates and reports on: <ul style="list-style-type: none"> - the effectiveness of the noise management system and the noise attenuation program (see condition 6(d)); - compliance against the noise criteria in this consent and the noise operating conditions; • includes a program to calibrate and validate the real-time noise monitoring results with the attended monitoring results over time (so the real-time monitoring program can be used as a trigger for further attended monitoring where there is a risk of non-compliance 	Noise Management Plan, Mt Thorley Warkworth, Rev 5.2 dated 8 August 2022			Appendix A of the NMP	Complies	

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Cond	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
		with the Noise criteria in this consent); and • defines what constitutes a noise incident and includes a protocol for identifying and notifying the Department and relevant stakeholders of any noise incidents.						
S3 C6	Blasting Criteria	The Applicant must ensure that the blasting on the site does not cause exceedances of the criteria in Table 4. These criteria do not apply if the Applicant has a written agreement with the relevant owner.	Blasting Records – 2020 Blasting Records – 2021 Blasting Records – 2022 Blasting Records – 2023				No blast exceedances were recorded during the audit period.	Complies
	Table 4	Location	Airblast overpressure dB (LinPeak)	Ground Vibration (mm/s)	Allowable Exceedance			
		Residence on Privately owned land	120	10	0%			
			115	5	5% of total number of blasts over a period of 12 months			
S3 C7	Blasting Hours	The Applicant must only carry out blasting on site between 7am and 5pm Monday to Saturday inclusive. No blasting is allowed on Sundays, public holidays, or at any other time without the written approval of the Planning Secretary.	Blasting Records – 2020 Blasting Records – 2021 Blasting Records – 2022 Blasting Records – 2023	Environment and Community Manager – all blasts occurred within permitted times			The detailed records show the time and dates for each blast. Samples of the blasting data confirms compliance.	Complies
S3 C8	Blasting Frequency	The Applicant may carry out a maximum of: a) 2 blasts a day; and	Blasting Records – 2020 Blasting Records – 2021 Blasting Records – 2022 Blasting Records – 2023	Environment and Community Manager – all blasts occurred within permitted times			The records maintained demonstrate that a maximum of two blasts have been made the site.	Complies
		b) 6 blasts a week, averaged over a calendar year, at the site.	Blasting Records – 2020 Blasting Records – 2021 Blasting Records – 2022 Blasting Records – 2023	Environment and Community Manager – all blasts occurred within permitted times			The number of blasts undertaken for each year are as follows: • 2020 –13, and 0.25 per week • 2021 - 0 and 0 per week • 2022 - 0 and 0 per week • 2022 - 0 and 0 per week (YTD)	Complies
S3 C9	Blasting Frequency	The Applicant must not carry out more than 1 blast a day within 500 metres of the Putty Road.	Mount Thorley Warkworth, Weekly Blasting Overviews for Year 2020 Mount Thorley Warkworth, Weekly Blasting Overviews for Year 2021 Mount Thorley Warkworth, Weekly Blasting Overviews for Year 2022 Mount Thorley Warkworth, Weekly Blasting Overviews for Year 2023 Blast Crew Weekly Schedule Updates	Environment and Community Manager –All blasts within 500m of Putty Rd / or Golden Highway require a road closure to maintain the required blast exclusion zone.			Blast exclusion maps 2020-2023 showing 300-500m exclusion zone. This identifies features that need management including public road closures, and infrastructure within 500m exclusion zone. -Weekly blast schedules – shows the likely road closures required for upcoming week. A sample of blast exclusion maps and weekly exclusion maps was reviewed that confirmed compliance with this requirement.	Complies

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Cond	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
S3 C10	Property Inspections	If the Applicant receives a written request from the owner of any privately-owned land within 2 kilometres of the approved open cut mining pit/s on site for a property inspection to establish the baseline condition of any buildings and/or structures on his/her land, or to have a previous property inspection updated, then within 2 months of receiving this request the Applicant must:		Environment and Community Manager- No baseline property inspections requested during the audit period			Not triggered, no baseline property inspections were triggered during the audit period.	Not triggered
		a) Commission a suitably qualified, experienced and independent person, whose appointment is acceptable to both parties to: <ul style="list-style-type: none"> establish the baseline condition of any buildings and other structures on the land, or update the previous property inspection report; and identify measures that should be implemented to minimise the potential blasting impacts of the project on these buildings and/or structures; and 		Environment and Community Manager- No baseline property inspections requested during the audit period			Not triggered, no baseline property inspections were triggered during the audit period.	Not triggered
		b) give the landowner a copy of the new or updated property inspection report.		Environment and Community Manager- No baseline property inspections requested			Not triggered, no baseline property inspections were triggered during the audit period.	Not triggered
		If there is a dispute over the selection of the suitably qualified, experienced and independent person, or the Applicant or the landowner disagrees with the findings of the property inspection report, either party may refer to the Planning Secretary for resolution.		Environment and Community Manager- No disputes with property owners have occurred during the audit period			Not triggered, nil disputes with property owners have occurred	Not triggered
S3 C11	Property investigations	If the owner of any privately-owned land claims that buildings and/or structures on his/her land have been damaged as a result of blasting on the site, then within 2 months of receiving this claim the Applicant must:		Environment and Community Manager- No new claims have been made during the audit period			Not triggered, Nil new claims have been made during the audit period	Not triggered
		commission a suitably qualified, experienced and independent person, whose appointment is acceptable to both parties to investigate the claim; and		Environment and Community Manager- Nil new claims have been made during the audit period			Not triggered, Nil new claims have been made during the audit period	Not triggered
S3 C11	Property investigations	give the landowner a copy of the property investigation report.		Environment and Community Manager- Nil new claims have been made during the audit period			Not triggered, Nil new claims have been made during the audit period	Not triggered
		If this independent property investigation confirms the landowner's claim, and both parties agree with these findings, then the Applicant must repair the damage to the satisfaction of the Planning Secretary. If there is a dispute over the selection of the suitably qualified, experienced and independent person, or the Applicant or the landowner disagrees with the findings of the independent property investigation, then either party may refer the matter to the Planning Secretary for resolution		Environment and Community Manager- Nil new claims have been made during the audit period			No new requests for property inspections were received during the audit period.	Not triggered

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Cond	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
S3 C12	Operating Conditions Blasting	During mining operations on site, the Applicant must: a) implement all reasonable and feasible measures to: • protect the safety of people and livestock in the surrounding area; • protect public or private infrastructure/property in the surrounding area from any damage; and • minimise the dust and fume emissions of any blasting;	Blast Management Plan Details on any blast related incidents impacting people or property during this audit period.	Environment and Community Manager- Nil blast related incidents during the audit period		One hundred and sixty-two blast related complaints were received during the audit period. A review of the detailed complaints register indicated that those complaints were associated with blast noise and/or vibration, however no property damage was reported. One blasting incident was recorded during the audit period. No evidence of personal injuries or property damage were recorded during this audit period.	Complies	
		b) Ensure that blasting on the site does not damage historic heritage	Details of any damage from blasting to these items during this audit period.	Environment and Community Manager- Nil known damage during the audit period, noting that grinding groove M was relocated to avoid impact			Complies	
		c) minimise the frequency and duration of any road closures, and	Mount Thorley, Warkworth – Road Closure Checklist dated 18 April 2023 Mount Thorley, Warkworth – Road Closure Checklist dated 28 April 2023	Environment and Community Manager- the road closure record is a form kept by the road closure supervisor. The road closure form includes the start and stop time of the actual road closure. The Blast Weekly Schedule provides a forecast for the following week where a road closure may be required for the upcoming blasts. Sometimes road closures may be planned, but not enacted due to weather conditions for example.		Road closures are planned and managed, with a checklist kept of road closure activities.	Noted	
		d) operate a suitable system (including a hotline and website updates) to enable the public to get up-to-date information on the proposed blasting schedule on site.	Blast Management Plan, Mount Thorley Warkworth, Revision 5.2 dated 10/2/2023. MTW Website			Section 5.2.4 of the Blast Management Plan describes the process for public notification of the blasting schedule and includes the operation of a telephone update line and information posted on the MTW website.	Complies	
S3 C13	Operating Conditions Blasting	The Applicant must not undertake blasting on site within 500 metres of: (a) any public road; or (b) any land outside the site that is not owned by the Applicant, unless: • the Applicant has a written agreement with the applicable infrastructure authority or landowner to allow blasting to be carried out closer to the infrastructure or land, and the Applicant has advised the Department in writing of the terms of this agreement; or • the Applicant has: - demonstrated to the satisfaction of the Planning Secretary that the blasting can be carried out closer to the infrastructure or land without compromising the safety of people or livestock, or damaging buildings and/or structures; and - updated the Blast Management Plan to include the specific measures that would be implemented while blasting is being carried out within 500 metres of the road or land.	Blast Management Plan, Mount Thorley Warkworth, Revision 5.2 dated 10/2/2023	Environment and Community Manager - blasts have been conducted within 500m of Public Road from time to time during the audit period. Road closures are enacted in accordance with the Road Closure Management Plan. -At NOOP, blasts are conducted within 500m of infrastructure (Public Road (Golden Hwy), Ausgrid transmission lines). NOOP blast impact monitoring plan also undertaken and recorded. -Crown Land – MTW holds the grazing licence for this lot within 500m of WML		BMP includes approvals for road closures on the Council or TfNSW owned roads surrounding the mine in the BMP Appendix – Road Closure Management Plan.	Complies	

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Cond	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations	
S3 C14	Blast Management Plan	<p>The Applicant must prepare a Blast Management Plan for the development to the satisfaction of the Planning Secretary and carry out the development in accordance with this plan. This plan must:</p> <p>a) be prepared in consultation with the EPA, and submitted to the Planning Secretary for approval prior to carrying out any development under this consent;</p>	<p>Blast Management Plan, Mount Thorley Warkworth, Revision 5.2 dated 10/2/2023</p> <p>Letter from Yancoal (G. Mulhearn) to EPA (N Ryan) titled "Yancoal, Mt Thorley Warkworth EPA Consultation on Noise, Air Quality Blasting and Water Management Plan" dated 18 July 2018</p> <p>Letter from EPA (N Ryan) to Yancoal (G Mulhearn) titled Environment Protection Licences 1376 and 1976 Environmental Management Plans" dated 19 July 2018</p> <p>Independent Environmental Audit Report for Yancoal Mount Thorley Warkworth, Hansen Bailey, July 2020</p> <p>Letter from DPE (J. Fittell) to Warkworth Mining Limited (G Mulhearn) titled "Approval of Warkworth Continuation Project Blast Management Plan" dated 24 March 2023</p>				<p>The blast management plan was updated during the audit period (administrative updates and approved on the 24 March 2023. DPE noted in their approval that consultation with the relevant parties (as detailed in this condition) was not required due to the administrative nature of the updates</p>	Complies	
		<p>b) describe the measures that would be implemented to ensure compliance with the blasting criteria and operating conditions of this consent;</p>					Appendix D of the BMP	Complies	
		<p>c) include a road closure management plan for blasting within 500 metres of a public road, that has been prepared in consultation with the RMS and Council;</p>					Appendix D of the BMP	Complies	
		<p>d) include a monitoring program for evaluating the performance of the development, including:</p> <ul style="list-style-type: none"> • compliance with the applicable criteria; • avoiding any blasting impacts on the historic heritage items referred to in condition 12 above; and • minimising the fume emissions from the site. 					Appendix E of the BMP	Complies	

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Cond	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations							
S3 C15	Air Quality Impact Assessment Criteria	Except for the land in Table 1, the Applicant must ensure that all reasonable and feasible avoidance and mitigation measures are employed so that particulate matter emissions generated by the development do not cause exceedances of the criteria listed in Tables, 5, 6, and 7 at any residence on privately owned land.	Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023		Measures to minimise dust observed on site included the operation of water carts, designated haul roads, rehabilitation of exposed areas (to provide ground cover and minimise dust generation), air monitoring, weather monitoring and stoppage of work (as reported in Annual Reviews) during unfavorable meteorological conditions	The Auditor's observations during the site inspection verified that the AQMP was being implemented. The 2021 Annual Review reported compliance with all short term and annual average air quality criteria. A total of 1,526 hours of mine stoppage was recorded following implementation of proactive and reactive measures to minimise dust and ensure compliance with air quality criteria. The 2021 Annual Review reported compliance with all short term and annual average air quality criteria. A total of 1,459 hours of mine stoppage was recorded following implementation of proactive and reactive measures to minimise dust and ensure compliance with air quality criteria. The 2022 Annual Review reported compliance with all short term and annual average air quality criteria with a total of 866 hours of mine stoppage recorded following pro-active and re-active measures to minimise dust and ensure air quality criteria.	Complies								
									Table 5	Pollutant	Averaging Period	Criterion			
										Total Suspended Solids (TSP) matter	Annual	90 ug/m ³			
									Table 6	Pollutant	Averaging Period	Criterion			
										Particulate matter < 10um (PM ₁₀)	Annual	30 ug/m ³			
Table 7	Pollutant	Averaging Period	Criterion												
	Particulate matter < 10um (PM ₁₀)	24 Hour	50 ug/m ³												
		Max Increase	Max Total Dust Deposited												
		Deposited Dust	2 g/m2/month	4 g/m2/month											
S3 C16	Mine Owned Land	The Applicant must ensure that all reasonable and feasible avoidance and mitigation measures are employed so that particulate matter emissions generated by the development do not cause exceedances of the criteria listed in Tables 5, 6 and 7 at any occupied residence on mine-owned land (including land owned by another mining or petroleum company, unless and to the extent that:	Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023 Air Quality Management Plan, Mt Thorley Warkworth, Rev 4.1 dated 28 July 2022		Measures to minimise dust observed on site included the operation of water carts, designated haul roads, rehabilitation of exposed areas (to provide ground cover and minimise dust generation), air monitoring, weather monitoring and stoppage of work (as reported in Annual Reviews) during	The 2021 Annual Review reported compliance with all short term and annual average air quality criteria. A total of 1,526 hours of mine stoppage was recorded following implementation of proactive and reactive measures to minimise dust and ensure compliance with air quality criteria. The 2021 Annual Review reported compliance with all short term and annual average air quality criteria. A total of 1,459 hours of mine stoppage was recorded following implementation of proactive and reactive measures to minimise dust and ensure compliance with air quality criteria. The 2022 Annual Review reported compliance with all short term and annual average air quality criteria with a total of 866 hours of mine stoppage recorded following pro-active and re-active measures to minimise dust and ensure air quality criteria.	Complies								
									the tenant and landowner by another mining or petroleum company) have been notified of any health risks associated with such exceedances in accordance with the notification requirements under schedule 4 of this consent;	Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023			No exceedances of dust criteria were reported during the audit period.	Not Triggered	
									the tenant of any land owned by the Applicant can terminate their tenancy agreement without penalty at any time, subject to giving reasonable notice and cause;	Noted			Residential tenancy agreements provide details of early termination without penalty (Clause 18).	Noted	

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Cond	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations	
S3 C16	Mine Owned Land	a) air quality monitoring is regularly undertaken to inform the tenant or landowner (if the residence is owned by another mining or gas company) of the particulate emissions at the residence; and	Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023				No exceedances of dust criteria were reported during the audit period.	Not Triggered	
		b) data from this monitoring is presented to the tenant and landowner in an appropriate format for a medical practitioner to assist the tenant and landowner in making informed decisions on the health risks associated with occupying the property.	Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023				No exceedances of dust criteria were reported during the audit period.	Not Triggered	
S3 C17	Operating Conditions Air Quality	The Applicant must: a) implement all reasonable and feasible measures to minimise the: • odour, fume and dust emissions of the development; and • release of greenhouse gas emissions from the development;	Air Quality Management Plan, Mt Thorley Warkworth, Rev 4.1 dated 28 July 2022 Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023			During the site inspection, the Auditor observed water carts in operation. The auditor noted, however, that minor levels of dust was being generated within the operating open cut and on haul roads, and in areas that were being stripped in preparation for mining, although not evidence that visual dust was leaving the site at the time of the site inspection. Significant areas of the site have been cleared and progressive rehabilitation works are behind schedule. The Auditor also observed significant areas, that while not ready for final rehabilitation, would benefit from temporary stabilisation to help reduce dust emissions during adverse wind conditions.	The Air quality management plan describes the air quality management system and procedures including the predictive tools. Fifty-eight dust-related complaints were received during the audit period. No exceedances in dust criteria were reported during the audit period. Areas of the site are being cleared in preparation for mining, and the disposal of overburden is progressing. The planned progressive rehabilitation works are, however, behind schedule. The Auditor also observed areas, that while not ready for final rehabilitation, would benefit from temporary stabilisation to help reduce dust emissions during adverse wind conditions	Non-compliant	Increase the rate of progressive rehabilitation works with the objective of meeting the established progressive rehabilitation targets. Prepare and implement a program for the stabilisation of unsealed / disturbed areas of the site including stockpiles, finished landforms, and disturbed areas that are not currently being actively worked / filled). The program should identify and classify all areas of the site that are currently disturbed according to the dust generation potential of those areas and establish clear targets for the stabilisation of those areas (either permanent or temporary) with the objective of meeting the requirements of the Blue Book.
		b) operate a comprehensive air quality management system that uses a combination of predictive meteorological forecasting and real-time air quality monitoring data to guide the day-to-day planning of mining operations and the implementation of both proactive and reactive air quality mitigation measures to ensure compliance with the relevant conditions of this consent;	Air Quality Management Plan, Mt Thorley Warkworth, Rev 4.1 dated 28 July 2022					Complies	
		c) minimise the air quality impacts of the development during adverse meteorological conditions and extraordinary events (see note d to Tables 5-7 above); and	Air Quality Management Plan, Mt Thorley Warkworth, Rev 4.1 dated 28 July 2022 Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023					Non-compliant	See Condition S3 C17a above

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Cond	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
		d) co-ordinate the air quality management on site with the air quality management at nearby mines (including the Mt Thorley, Bulga, Wambo and Hunter Valley Operations mines) to minimise any cumulative air quality impacts	Air Quality Management Plan, Mt Thorley Warkworth, Rev 4.1 dated 28 July 2022 Inter mine meeting minutes dated 29 June 2023 Email from Yancoal (G Mulhearn) to Peabody Wambo Coal dated February 8 2023.	Environment and Community Manager - interactions on day to day observations regarding emissions from other mines are typically done by phone call – not often required at inspection locations of CROs, as these inspections are close to MTW operations.		Section 3.2 describes how MTW coordinate air quality management with the neighbouring mines. Evidence of interaction and coordination was provided and included inter mine coordination meeting minutes.	Complies	
S3 C18	Air Quality Management Plan	The Applicant must prepare a detailed Air Quality Management Plan for the development to the satisfaction of the Planning Secretary, and carry out the development in accordance with this plan. This plan must:	Air Quality Management Plan, Mt Thorley Warkworth, Rev 4.1 dated 28 July 2022 Air Quality Management Plan, Mt Thorley Warkworth, Rev 4.1 dated 28 July 2022 Letter from Yancoal (G. Mulhearn) to EPA (N Ryan) titled “Yancoal, Mt Thorley Warkworth EPA Consultation on Noise, Air Quality Blasting and Water Management Plan” dated 18 July 2018 Letter from EPA (N Ryan) to Yancoal (G Mulhearn) titled Environment Protection Licences 1376 and 1976 Environmental Management Plans” dated 19 July 2018 Independent Environmental Audit Report for Yancoal Mount Thorley Warkworth, Hansen Bailey, July 2020 Letter from DPE (J Fittell) to Yancoal (G.Mulhearn) titled “Mt Thorley Continuation Project (SSD -6465) and Warkworth Continuation Project SSD (6464) dated 8 August 2022			The AQMP was updated during this audit period and approved by DPE on the 8th of August 2022. The EPA, in 2018 elected to not provide comments on the air quality management plan	Complies	
		b) describe the measures that would be implemented to ensure compliance with the relevant air quality criteria and operating conditions of this consent;	Air Quality Management Plan, Mt Thorley Warkworth, Rev 4.1 dated 28 July 2022 Independent Environmental Audit Report for Yancoal Mount Thorley Warkworth, Hansen Bailey, July 2020			Section 5 and 6 of the AQMP describes management and mitigation measures to ensure compliance with criteria	Complies	
		c) describe the project air quality management system;	Air Quality Management Plan, Mt Thorley Warkworth, Rev 4.1 dated 28 July 2022			Section 5 and 6 of the AQMP	Complies	
		d) include provisions for keeping the local community informed about the operation of the air quality management system and monitoring programs, including regular briefings and a public information session within 6 months of the granting of this development consent;	Air Quality Management Plan, Mt Thorley Warkworth, Rev 4.1 dated 28 July 2017 Independent Environmental Audit Report for Yancoal Mount Thorley Warkworth, Hansen Bailey, July 2020			Section 8 of the AQMP	Complies	
		e) include an air quality monitoring program that: • adequately supports the proactive and reactive air quality management system; • evaluates and reports on: - the effectiveness of the air quality management system; and - compliance against the air quality	Air Quality Management Plan, Mt Thorley Warkworth, Rev 4.1 dated 28 July 2022 Independent Environmental Audit Report for Yancoal Mount Thorley Warkworth, Hansen Bailey, July 2020			Section 7 and Appendix A of the AQMP describes the air quality monitoring program.	Complies	

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Cond	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
		operating conditions; and <ul style="list-style-type: none"> defines what constitutes an air quality incident, and includes a protocol for identifying and notifying the Department and relevant stakeholders of any air quality incidents; and 						
S3 C18	Air Quality Management Plan	f) include a protocol that has been prepared in consultation with the owners of nearby mines (including the Warkworth, Bulga, Wambo and Hunter Valley Operations) to minimise the cumulative air quality impacts of these mines and the development.	Air Quality Management Plan, Mt Thorley Warkworth, Rev 4.1 dated 28 July 2022	Manager Environment and Community - Current version of the AQMP is v4.1 (approved 8/8/2022). Changes to the AQMP since the last audit have occurred for v4.0 (approved 20/7/21), which included the detail of the inter-site communications protocol.		Section 3.2 of the AQMP addresses cumulative impacts and the details of the site protocol	Complies	
S3 C19	Meteorological Monitoring	For the life of the development, the Applicant must ensure that there is a meteorological station in the vicinity of the site that: a) complies with the requirement in the Approved Methods for Sampling of Air Pollutant in New South Wales guidelines; and	Monthly Maintenance Records – Charlton Ridge Met Station, 9 March 2021 Benchmark Monitoring Calibration Records for Solar Radiation, Relative Humidity, Wind Direction, Wind Speed and Type, Ambient Temperature, Rain Gauge and Wind Sensor		Weather Station (Photograph 3)	Calibration certificates confirm compliance with AS3580.	Complies	
		b) is capable of continuous real-time measurement of temperature inversions in accordance with the NSW Industrial Noise Policy, unless a suitable alternative is approved by the Planning Secretary following consultation with the EPA.	Monthly Maintenance Records – Charlton Ridge Met Station, 9 March 2021			Monitoring records demonstrate that the met station provides real time continuous monitoring.	Complies	
S3 C20	Water Supply	The Applicant must ensure that is has sufficient water for all stages of the development, and if necessary, adjust the scale of mining operations to match its available water supply.	Water Management Plan, Mt Thorley Warkworth, Rev 5.2 dated 31 October 2021.			There were no water supply issues during this audit period. Rainfall during this period was well above average. Section 6 of the water management plan provides details of water management activities to ensure adequate supply of water. This includes sources and security of water supply, water sharing with neighboring mines, off site water transfer and discharges.	Complies	

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Cond	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
S3 C21	Compensatory Water Supply	<p>The Applicant must provide a compensatory water supply to the owner of any privately-owned land whose basic landholder water rights as defined in the Water Management Act 2000 are adversely and directly impacted as a result of the development. This supply must be provided in consultation with NRAR, and to the satisfaction of the Planning Secretary.</p> <p>The compensatory water supply measures must provide an alternative long-term supply of water that is equivalent to the loss attributable to the development. Equivalent water supply should be provided (at least on an interim basis) as soon as practicable from the loss being identified, unless otherwise agreed with the landowner.</p> <p>If the Applicant 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 Planning Secretary for resolution. If the Applicant is unable to provide an alternative long-term supply of water, the Applicant must provide alternative compensation to the satisfaction of the Planning Secretary.</p>		Environment and Community Manager – none were required during the audit period.		Compensatory water supplies were not required during the audit period	Not triggered	
S3 C22	Water Discharges	<p>Unless an EPL or the EPA authorises otherwise, the Applicant must ensure that all surface water discharges from the site comply with the:</p> <p>a) discharge limits (both volume and quality) set for the development in any EPL; and</p>	<p>Annual Return (AR) Non-Compliance Detail Licence Number 1376, 01 Dec 2021 – 30 November 2022 (EPA Website)</p> <p>Annual Return Non-Compliance Detail Licence Number 1376, 01 Dec 2020 – 30 November 2021 (EPA Website)</p> <p>Annual Return Non-Compliance Detail Licence Number 1376, 01 Dec 2019 – 30 November 2020 (EPA Website).</p>			<p>The following non-compliances were identified by the Annual Returns</p> <ul style="list-style-type: none"> • Dam 1S overtopped as a result of heavy or sustained rainfall which caused significant runoff (2023 AR) • Dam 1S overtopped as a result of heavy or sustained rainfall which caused significant runoff (2021 AR) • Discharge from 9S via spillway to Loders Creek (2021 AR) 	Non-compliant	A risk assessment and review of the storage capacity of the retention dams be undertaken that takes into account the increasing risk of extreme weather events, including extended duration wet weather patterns.
		<p>b) relevant provisions of the POEO Act or Protection of the Environment Operations (Hunter River Salinity Trading Scheme) Regulation 2002</p>	<p>Annual Return – Mt Thorley Operations Pty Limited Licence 1976 (01-04-2019 to 31-03-2020)</p> <p>Annual Return – Mt Thorley Operations Pty Limited Licence 1976 (01-04-2020 to 31-03-2021)</p> <p>Annual Return – Mt Thorley Operations Pty Limited Licence 1976 (01-04-2021 to 31-03-2022)</p>	Environment and Community Manager – HRSTS discharge all < 100ML / day limit reported in Annual Returns (Point 4). All within EPL limits for pH and TSS		As reported in the 2021 Annual Return for EPL 1976, Exceedance of the HRTS hourly volume discharge limit during analysis of flow data following a discharge event. Note that this incident was not reported in the 2021 Annual Review.	Non-compliant	The auditor understands that this discharge was an isolated event and has been investigated. No additional actions are required.
S3 C23	Water Transfers	The Applicant may receive water from, and transfer water to, the Warkworth mine, Hunter Valley Operations mine, Bulga mine and Redbank Power Station.	<p>Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021</p> <p>Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022</p> <p>Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023</p> <p>Water Management Plan, Mt Thorley Warkworth, Rev 5.2 dated 31 October 2021</p>	Environment and Community Manager - Water sharing is noted in Water Management Plan, and in the EPLs for MTO and WML. MTO and WML are operated as a complex for water management. Agreements exist with HVO and Bulga Coal. Transfers are reported in the Annual Review reports. 2022 – 190ML transferred to Bulga Coal.		Noted, each Annual Review details water balances including external water sources	Noted	

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Cond	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations	
S3 C24	Water Management Performance Measures	The Applicant must comply with the performance measures in Table 8 to the satisfaction of the Planning Secretary				Refer to Table 8 below.	Complies		
	Table 8	Feature	Performance Measure						
		Water management – General	Minimise the use of clean water (i.e. water not in contact with disturbed areas) on site Minimise the need for make-up water from external supplies (apart from permissible mine water transfers). Maximise use of mine water	Environment and Community Manager - MTO is quite a static site, with mining operations having reached their limit some time ago. We have contemplated installing a sediment basin on MTO to manage rehabilitation runoff. This is in relation to an incident in January 2021. Sediment basin design report from engineers SLR which sizes the MTO sed basin in accordance with the Managing Urban Stormwater: Soils and Construction including Volume 1. Note that this has not been constructed as we identified a regulatory conflict issue with HRSTS Regulation which would not permit use of sediment dam and runoff to leave site through a sed dam. Nonetheless – this demonstrates our design philosophy in accordance with Blue Book.	MTW operates and integrated water management system which includes clean and dirty water separation systems to minimise contact with disturbance systems.	This commitment is addressed in Sections 5.4-5.6, 7.4.2 and 8.4 WMP Annual water balance includes make up water from other sources.	Complies		
		Construction and operation of infrastructure	Design, install and maintain erosion and sediment controls generally in accordance with the series Managing Urban Stormwater: Soils and Construction including Volume 1, Volume 2A – Installation of Services and Volume 2C – Unsealed Roads Design, install and maintain the infrastructure within 40 m of watercourses generally in accordance with the Guidelines for Controlled Activities on Waterfront Land (DPI 2007), or its latest version Design, install and maintain any creek crossings generally in accordance with the Policy and Guidelines for Fish Habitat Conservation and Management (DPI, 2013) and Why Do Fish Need To Cross The Road? Fish Passage Requirements for Waterway Crossings (NSW Fisheries 2003), or their latest versions		This commitment is included in Table 5.1 of the WMP. Erosion and Sediment controls including sediment dams, clean and dirty water diversions and rehabilitation activities (to provide groundcover and prevent erosion) were installed. WSP have undertaken catchments assessments and have designed in accordance with the Blue Book requirements, thus has been reviewed by a Certified Professional in Erosion and Sediment Control	Complies			
		Clean water diversion & storage infrastructure	Design, install and maintain the clean water system to capture and convey the 100 year ARI flood. Maximise as far as reasonable and feasible the diversion of clean water around disturbed areas on site		This commitment is included in Table 5.1 of the WMP. Clean water diversions were observed on site to prevent interaction with disturbed areas	Complies			
		Sediment dams	Design, install and/or maintain the dams generally in accordance with the series Managing Urban Stormwater: Soils and Construction – Volume 1 and Volume 2E Mines and Quarries		This commitment is included in Table 5.1 of the WMP Sediment dams were installed and appeared to be maintained in accordance with the Blue Book	Complies			
		Mine water storages	Design, install and/or maintain mine water storage infrastructure to ensure no discharge of mine water off-site (except in accordance with condition 24) On-site storages (including mine infrastructure dams and treatment dams) are suitably designed, installed and/or maintained to minimise permeability Maintain adequate freeboard within the pit void at all times to minimise the risk of discharge to surface waters		This commitment is included in Table 5.1 of the WMP.	Complies			
		Flood mitigation measures	Design, install and maintain flood mitigation measures along the western side of the development, to ensure there is adequate freeboard (at least 500mm) between the Probable Maximum Flood level in Wollombi Brook and the crest levee or peak of the flood mitigation infrastructure. Residual impacts downstream must be managed in an appropriate manner.		Community and Environment Manager - A 2016 flood study engaged by Singleton Council by BMT WBM identified the PMF (Extreme Flood) RL as 69.3m at Bulga Bridge, and 62.8m at Warkworth. Figure 9-5 on page 122 of the PDF flood report includes a figure of Design Flood Extents, including the PMF. It is only MTO that shows potential for flood extent reaching the pit. For WML the flood extent is some distance from the pit. Evidence has previously been sought from the BMT WBM that the Charlton Levee is RL 70.5m, and the corresponding PMF level of 70.0m exists in that area.	BMT global (hydrologists) have reviewed the height of the flood level and have confirmed a 500mm freeboard exists between the PMF level and the height of the crest of the flood levee	This commitment is included in Section 7.5.2 of the WMP.	Complies	
		Overburden emplacements	Design, install and maintain emplacements to encapsulate and prevent migration of tailings, acid forming and potentially acid forming materials, and saline and sodic material Design, install and maintain emplacements to prevent off-site migration of saline groundwater seepage				This commitment is addressed in Sections 5.4-5.6, 7.4.2 and 8.4 of the WMP.		
Chemical and hydrocarbon storage	Chemical and hydrocarbon products to be stored in bunded areas in accordance with the relevant Australian Standards		Appropriate bunding was provided around hydrocarbon storage tanks, other fuels and chemicals were observed to be stored in designated chemical storage containers		This commitment is included in Table 5.1 of the WMP. Appropriate bunding was provided around hydrocarbon storage tanks, other fuels and chemicals were observed to be stored in designated chemical storage containers	Complies			
S3 C24	Table 8	Loders Creek	Maintain or improve baseline channel stability and maintain riparian health			This commitment is included in Section 7.5.2 of the WMP and is reported annually in Section 6.7.4 of the Annual Review. Each Annual Review includes a detailed Annual Stream Health and Stability report. The same findings were reported in each annual report as follows: "The majority of Loders Creek displayed stable environments. Generally, the monitoring identified that the creeks have not significantly changed from what was observed during the previous year's survey".	Complies		

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Cond	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
S3 C25	Water Management Plan	The Applicant must prepare a Water Management Plan for the development to the satisfaction of the Planning Secretary, and carry out the development in accordance with this plan. The plan must:	Water Management Plan, Mt Thorley Warkworth, Rev 5.1 dated 31 October 2021			The Water Management Plan was revised in 2021.	Complies	
		a) be prepared in consultation with the EPA and NOW, and BCD and submitted to the Planning Secretary for approval prior to carrying out any development under this consent; and	<p>Letter from EPA (N Ryan) to Yancoal (G Mulhearn) titled Environment Protection Licences 1376 and 1976 Environmental Management Plans" dated 19 July 2018</p> <p>Letter from Yancoal (G.Mulhearn) to DPE (M Sprott) titled "Mount Thorley Warkworth updated Water Management Plan" dated 20 December 2019</p> <p>Letter from DPE (M Sprott) to Yancoal (G Mulhearn) titled "Mount Thorley Water Management Plan, dated 13 May 2020</p> <p>Independent Environmental Audit Report for Yancoal Mount Thorley Warkworth, Hansen Bailey, July 2020</p>			<p>There were several revisions of the Water Management Plan approved by DPE during the audit period. These were:</p> <ul style="list-style-type: none"> Version 4.4 (approved by DPE on the 13th of May 2020 Version 5.1 (approved by DPE on the 15 November 2021 <p>The evidence of consultation provided in Appendix A of the WMP covers the previous versions of the plan. The EPA or DPE Water were not consulted during the preparation of the most recent version of the plan or that the plan has been approved by DPE.</p> <p>In their letter dated 20 December 2019, Yancoal requested the agreement of the Secretary to revise the plan without undertaking any consultation with the relevant parties.</p> <p>DPE confirmed the requirement to undertake consultation with DPE and NRAR prior to the next revision of the water management plant and include evidence of the consultation when submitting their revised document.</p>	Complies	
		a) in addition to the standard requirements for management plans (see condition 3 of schedule 5), include a:	<p>Water Management Plan, Mt Thorley Warkworth, Rev 5.1 dated 31 October 2021</p>			<p>Section 6 of the Water Management Plan provides details of water sources (inputs) and water uses (outputs) for the site. These figures have been used to design the water management system, including the sizing of sediment basins. Since 2018 (likely due to the effects of global warming and La Nina) there has been an increase in the frequency and duration of extreme rainfall events, with 2022 one of the wettest years on record. There have been several instances where overtopping of sediment basins may have been due to larger than normal rainfall events resulting in exceedance of design criteria.</p>	Complies	MTW review the water balance model to take into account the impacts of climate, for example the impacts of higher-than-normal rainfall events due to more extreme La-Nina events.

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Cond	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
S3 C25	Water Management Plan	<p>(ii) Surface Water Management Plan, that includes:</p> <ul style="list-style-type: none"> • detailed baseline data on surface water flows and quality in the watercourses that could potentially be affected by the development; • a 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); and - mine water management systems including irrigation areas; • 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 coal reject materials; - 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 development: <ul style="list-style-type: none"> - mine water management system; - surface water quality of Loaders Creek; and - channel stability, stream and riparian vegetation health of Loaders Creek; • a program to monitor and report on: <ul style="list-style-type: none"> - the effectiveness of the mine water management system; and - surface water flows and quality, stream and riparian vegetation health in Loaders Creek potentially affected by the development; • a plan to respond to any exceedances of the performance criteria, and mitigate and/or offset any adverse surface water impacts of the development; and 	Water Management Plan, Mt Thorley Warkworth, Rev 5.1 dated 31 October 2021			Sections 6,7 and 9 of the WMP The requirements of this condition have been satisfied. It is noted however that the Water Management Plan doesn't consider water treated and discharged from the site sewage treatment plant.	Complies	Update the WMP to include water volumes and quality from the STP, as well as any necessary treatment and/or testing
S3 C25	Water Management Plan	<p>(iii) Groundwater Management Plan, which includes:</p> <ul style="list-style-type: none"> • detailed baseline data on groundwater levels, yield and quality in the region, and privately-owned groundwater bores, that could be affected by the development; • groundwater assessment criteria, including trigger levels for investigating any potentially adverse groundwater impacts; • a program to monitor and report on: <ul style="list-style-type: none"> - groundwater inflows to the open cut pits; - the seepage/leachate from water storages, emplacements, backfilled voids, and final voids; - the impacts of the development 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 	Water Management Plan, Mt Thorley Warkworth, Rev 5.1 dated 31 October 2021			Section 8 and 9 of the WMP	Complies	

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Cond	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
		and riparian vegetation; o base flows to Loders Creek; • a plan to respond to any exceedances of the groundwater assessment criteria; and • a program to validate the groundwater model for the development. including an independent review of the model with every independent environmental audit, and • compare the monitoring results with modelled predictions.						
S3 C26	Protection of Heritage Items	Applicant must protect the heritage items identified in Table 1 of Appendix 4.	Salvage Reports Care Agreement			Salvage reports and the Care Agreement were sighted and confirm that MTW has managed indigenous heritage issues in accordance with the requirements of the management plan.	Complies	
S3 C27	Loders Creek Aboriginal Heritage Conservation Area	Within 3 years of the commencement of development under this consent, unless the Planning Secretary agrees otherwise, the Applicant must enter into a conservation agreement or agreements pursuant to section 698 of the National Parks and Wildlife Act 1974 relating to the Loders Creek Aboriginal Cultural Heritage Conservation Area, recording the obligations assumed by the Applicant under the conditions of this consent in relation to the conservation area, and register the agreements pursuant to section 69F of the National Parks and Wildlife Act 1974.	Letter from Yancoal (G. Mulhearn) to DPE (C McNally) titled "Mt Thornley Continuation Project (SSD 6465) – Condition 27, Schedule 3 – Security of the Loders Creek Cultural Heritage Management Plan, Aboriginal Cultural Heritage Management Plan" dated 12 February 2019 Letter from DPE (H Reed) to Yancoal (G. Mulhearn), titled "Mt Thorley Continuation Project SSD 6565) Loders Creek Aboriginal Cultural Heritage Conservation Area" dated 15 February 2019 Conservation Agreement between The Minister and Miller Pohang Coal Company Pty Ltd for Loders Creek Aboriginal Cultural Heritage Conservation Area dated 6 February 2022			The Department approved a request to extend the timeframe for completion of the agreement to the 15th of February 2020, however the agreement was not executed until the 6th of 3 November 2022. Whilst the conservation agreement has been entered into in November 2022, registration of the agreements has not been completed pursuant to s69F of the NPW Act.	Non - Compliant	Finalise the registration of the conservation agreement for Loders Creek.
S3 C28	Aboriginal Heritage Management Plan	The Applicant must prepare an Aboriginal Heritage Management Plan for the development to the satisfaction of the Planning Secretary and carry out the development in accordance with this plan. The plan must:	Aboriginal Heritage Management Plan Mt Thorley Warkworth SSD 6464 and 6465 dated 27 July 2022 Letter from DPE (J Fittell) to Warkworth Mining (G Mulhearn) titled "Aboriginal Heritage Management Plan for Mount Thorley Continuation Project (SSD 6465) and Warkworth Continuation Project (SSD 6464) dated 12th August 2022 Loder Creek Aboriginal Cultural Heritage Conservation Area, Plan of Management 2018-2022, V1 19th March 2019 Letter from DPE (H Reed) to Yancoal (G Mulhearn) titled "Mt THorely Continuation Project (SSD 6465) Loders Creek Aboriginal Cultural Heritage dated 19th March 2019			Further review of the plan was undertaken during the audit period with the Department approving Revision 4 of the plan on the 12 the of August 2022. An additional plan was prepared for the Loder's Creek conservation area. This was approved by DPE on the 19th of March 2019.	Complies	
		a) be prepared in consultation with BCD and Aboriginal stakeholders. and submitted to the Planning Secretary for approval prior to carrying out any development under this consent;	Aboriginal Heritage Management Plan Mt Thorley Warkworth SSD 6464 and 6465 dated 27 July 2022 Letter from DPE (J Fittell) to Warkworth Mining (G Mulhearn) titled "Aboriginal Heritage Management Plan for Mount Thorley Continuation Project (SSD 6465) and Warkworth Continuation Project (SSD 6464) dated 12th August 2022			A summary of consultation is provided in Section 2 Detailed consultation records with Heritage NSW and Aboriginal Stakeholders are provided in Schedule 18. DPE approved Revision 4 of the Plan on the 12th of August 2022	Complies	

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Cond	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
		b) include a program to: <ul style="list-style-type: none"> • salvage, investigate and/or manage Aboriginal sites and potential archaeological deposits within the project disturbance area; • assess and remove scarred trees within the disturbance area; • protect and monitor Aboriginal sites outside the project disturbance area; • manage the discovery of any new Aboriginal objects or skeletal remains during the development; • facilitate access to archaeological sites on site for Aboriginal stakeholders; and • Aboriginal stakeholders are consulted and involved in the conservation and management of Aboriginal cultural heritage on the site. 	Aboriginal Heritage Management Plan Mt Thorley Warkworth SSD 6464 and 6465 dated 27 July 2022			The AHMP includes a program for the protection and where required salvage of heritage artifacts.	Complies	
		c) Include a research program, that has been prepared by suitable qualified and experienced persons whose appointment has been approved by the Planning Secretary, for locating and evaluating sand bodies of likely early Pleistocene and early Holocene age that may contain evidence of Aboriginal habitation in the Upper Hunter Valley.	Aboriginal Heritage Management Plan Mt Thorley Warkworth SSD 6464 and 6465 dated 27 July 2022			The Hunter Valley Sand Bodies Research Program is referenced in Section 38 of the AHMP and is provided in Schedule 17 of that Plan.	Complies	
S3 C29	Monitoring of Coal Transport	The Applicant must: <ul style="list-style-type: none"> a) keep records of the amount of coal transported from the development in each calendar year; and 	Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023			Table 4.1 of each Annual Review provides details of the amount of coal transported from the project (annually)	Complies	
		<ul style="list-style-type: none"> b) make these records available on its website at the end of each calendar year. 	Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023			The 2020 and 2021 Annual Reviews are publicly available on the MTW website; however, the 2022 Annual Review was not on the website at the time of this IEA. Therefore, the coal transport records for 2022 were not publicly available as required by this Condition. The Auditor notes that the 2022 Annual Review had been submitted to DPE but had not yet been approved.	Non-compliant	Ensure that the coal transportation records are regulatory updated.

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Cond	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
S3 C30	Visual Operating Conditions	<p>The Applicant must:</p> <p>a) implement all reasonable and feasible measures to minimise the visual and off-site lighting impacts of the development, including lighting impacts on road users and impacts of mining voids;</p>	Mt Thorley Warkworth Lighting Review EMM 6 May 2020	<p>Environment and Community Manager – The following information was provided to DPE 24 May 2023 in response to an RFI in May 2023:</p> <ul style="list-style-type: none"> o Progressive rehabilitation is used to minimise visual impact; o MTW uses vegetated bunds, vegetative screening, and screen fencing along the boundary of the site including adjoining public roads; o A lighting assessment review was completed most recently in May 2020 by EMM Consulting, for the purpose of reviewing lighting measures implemented at the site to ensure that their implementation is compliant with the relevant conditions of the approvals. The assessment included field lux measurements and qualitative assessment. The lighting review found that operations at MTW meet the approval requirements. The review found that “no improvements are currently required to address lighting impacts from any of the assessment locations assessed as part of this lighting review. Nonetheless, it is recommended that temporary lighting plant be inspected to ensure that all lighting is directed below the horizontal, where safe to do so.” 		<p>Environmental induction covers lighting. The Lighting review undertaken in 2020 confirms the offsite lighting impacts were meeting the requirements of this condition. However, 90 lighting complaints were received during the audit period. A review of the complaints indicates that the community impacts are from relocatable lighting and mobile plant, but that fixed lighting is not generating complaints. As part of the internal complaint investigations, CROs assess mobile lighting and arrange changes in light locations or direction and that the actions, in general resolve the issues. It is apparent that there is insufficient planning for the location and use of mobile lighting and therefore all reasonable and feasible mitigation measures have not been used.</p>	Non-compliant	<p>Ensure that personnel responsible for planning and / or managing night works undertake proactive planning for all after hours works. The planning should identify the optimal lighting setup for those activities and that the implementation of the lighting plans be checked prior to undertaking those activities by CROs or other appropriately trained personnel.</p>
		<p>b) establish and maintain vegetated bunds, vegetative screening and/or screen fencing along the boundary of the site including adjoining public roads where appropriate;</p>		<p>The assessment included field lux measurements and qualitative assessment. The lighting review found that operations at MTW meet the approval requirements. The review found that “no improvements are currently required to address lighting impacts from any of the assessment locations assessed as part of this lighting review. Nonetheless, it is recommended that temporary lighting plant be inspected to ensure that all lighting is directed below the horizontal, where safe to do so.”</p>	<p>During the site inspection vegetated visual screening was observed from the major access roads to the site.</p>	<p>Visual screening has been maintained.</p>	Complies	
		<p>c) ensure that all external lighting associated with the development complies with Australian Standard AS4282 (/NT) 1997 - Control of Obtrusive Effects of Outdoor Lighting, or its latest version; and</p>	<p>Mt Thorley Warkworth Lighting Review EMM 6 May 2020 MTW Environmental Monitoring Report, - Night Shift 13 August 2020 MTW Environmental Monitoring Report, - Night Shift 7 August 2021 Environmental Management at Yancoal MTW – New Starters Presentation 2022, 8 June 2023</p>	<p>o MTW’s operational procedures include consideration of lighting impacts from mobile lighting plant to minimise lighting impact to neighbours when setting up the lighting plant. In addition to consideration when setting up lighting plant, MTW utilises inspections from Community Response Officers around the boundary of operations at or just after dusk to attempt to identify any lighting plant that has potential to be intrusive, and feed directly back to operations to request and review lighting plant changes when considered appropriate.</p> <p>o For community lighting complaints, MTW’s complaint response process utilises MTW’s Community Response Officers to respond by inspecting the relevant area, discussing with community members, and feeding back directly to operations to request and review lighting plant changes when considered appropriate.</p>		<p>Environmental induction covers lighting. The Lighting review undertaken in 2020 confirms the offsite lighting impacts was meeting the requirements of this condition. However, 90 lighting complaints were received during the audit period. A review of the complaints indicates that the community impacts are from relocatable lighting and mobile plant, but that fixed lighting is not generating complaints. As part of the internal complaint investigations, CROs assess mobile lighting and arrange changes in light locations or direction and that the actions, in general resolve the issues. It is apparent that there is insufficient planning for the location and use of mobile lighting and therefore all reasonable and feasible mitigation measures have not been used.</p>	Non-compliant	<p>Ensure that personnel responsible for planning and / or managing night works undertake proactive planning for all after hours works. The planning should identify the optimal lighting setup for those activities and that the implementation of the lighting plans be checked prior to undertaking those activities by CROs or other appropriately trained personnel.</p>

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Cond	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
S3 C30	Visual Operating Conditions	d) monitor and report on the effectiveness of these measures.	Mt Thorley Warkworth Lighting Review EMM 6 May 2020 Mt Thorley Warkworth Lighting Review EMM 6 May 2020 MTW Environmental Monitoring Report, - Night Shift 13 August 2020 MTW Environmental Monitoring Report, - Night Shift 7 August 2021			The effectiveness of lighting controls is monitored through routine night shift inspection undertaken by the Community Relations Officer and is reported in each Annual Review (Section 6.6 – amenity and lighting)	Complies	
		e) Initial works to establish the vegetative bunds and/or screening referred to in condition 30(b) must be undertaken within 6 months of the date of commencement of development under this consent (unless otherwise agreed by the Planning Secretary), in accordance with a tree screening plan that has been prepared in consultation with Council and to the satisfaction of the Planning Secretary. The use of screen fencing must be limited to areas where vegetative screening is not feasible, or as an interim measure prior to establishment of vegetation.	Independent Environmental Audit Report for Yancoal Mount Thorley Warkworth, Hansen Bailey, July 2020			Assessed as Not Triggered by the previous audit as it was required prior to the audit period. Vegetation bunds/screening in condition 30(b) are illustrated on page 2 of the Rehab and Visual Screening Presentation provided by MTW during the IEA. The initial works began in 2016 with a shade cloth fitted to security fences from Dragline Crossing to Wallaby Scrub Road intersection. A Stage 1 bund was also constructed along a section of Putty Road. The 2017 audit sighted consultation with Singleton Council. No evidence that the Tree Screening Plan was prepared to the satisfaction of the Secretary.	Not Triggered	
S3 C31	Additional Visual Impact Mitigation	Upon receiving a written request from the owner of any residence on privately-owned land who has, or would have, significant direct views of the mining operations from this residence and/or its associated facilities (such as pool or barbeque area) during the development. the Applicant must implement additional visual mitigation measures (such as landscaping or vegetation screens) on the land in consultation with the landowner. These measures must be reasonable and feasible, and directed towards reducing the visibility of mining operations from the residence and/or its associated facilities. If within 3 months of receiving this request from the owner, the Applicant and the owner cannot agree on the measures to be implemented, or there is a dispute about the implementation of these measures, then either party may refer the matter to the Planning Secretary for resolution.		Environmental and Community Manager – no requests for addition visual impact mitigation has been received during the audit period.		No requests for addition visual impact mitigation have been received during the audit period.	Not Triggered	

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Cond	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
S3 C32	Bushfire Management	The Applicant must: a) ensure that the development is suitably equipped to respond to any fires on site; and	Mount Thorley, Warkworth Bushfire Management Plan, Prepared by Emergency Services Officer, dated 17 September 2019			The Bushfire Management Plan notes the following equipment is available on site which can be used for combating bushfires: <ul style="list-style-type: none"> ISUZU FTO 800 2& 4 wheel drive firefighting appliance with a water capacity of 200 Litres and 120 litres of firefighting foam Water carts with waster capacity up to 2000 litres and 120 litres of firefighting foam D11 Dozers and graders to be used for the preparation of fire breaks Portable fire extinguishers, fire depots, and fire suppression throughout the mine infrastructure 	Complies	
S3 C32	Bushfire Management	b) assist the Rural Fire Service and emergency services as much as practicable if there is a fire in the vicinity of the site.	Have there been any bushfires on site during this audit period?	Environment and Community Manager – No bushfires were experienced during the audit period.		No bushfires were experienced during the audit period.	Not Triggered	
S3 C33	Waste	The Applicant must: a) implement all reasonable and feasible measures to minimise the waste (including coal reject) generated by the development;	Waste Management Plan Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023	Environment and Community Manager – Production processes and CHPP aim to maximise coal recovery, and record strong yield performance, thereby minimizing coal reject. For general wastes – MTW has prepared an Internal Waste Management Plan and the Induction and training programs cover recycling and waste management.	Facilities for the collection and segregation of wastes are provided at all maintenance and administrative areas.	Facilities are provided across the site for the collections and segregation of wastes.	Complies	
		b) ensure that the waste generated by the development is appropriately stored, handled and disposed of; and	Waste Management Records		Facilities for the collection and segregation of wastes are provided at all maintenance and administrative areas.	Wastes are collected, segregated and stored appropriately on-site. Wastes are collected for off-site recycling or disposal by a waste contractor. Details of waste collection and disposal were sighted by the Auditor.	Complies	
		c) monitor and report on effectiveness of the waste minimisation and management measures in the Annual Review.	Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023	Environment and Community Manager – Waste reporting is covered in the Annual Review.		Routine reporting of waste management activities is included in the annual reviews.	Complies	

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Cond	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations	
S3 C34	Rehabilitation Objectives	The Applicant must rehabilitate the site to the satisfaction of the Resources Regulator in accordance with the provisions under the Mining Act 1992 and must be generally consistent with the proposed rehabilitation strategy described in the EIS (and depicted conceptually in the figure in Appendix 5), and comply with the objectives in Table 9.	Ecological Monitoring reports for Rehab areas for 2021 (Emergent Ecology/Dendra Systems) and 2022 (Emergent Ecology/Mosaic Ecology).	Environment and Community Manager - Rehabilitation Management Plan on website, which includes Forward Program and Rehabilitation Objectives. Interviews with rehabilitation staff were undertaken by the ecologists during site visit on 26 April 2023.	Parts of rehabilitation areas were inspected by the Ecologists on 26 April 2023.	Ecological reports reviewed by the ecology specialists detailed the findings of monitoring in rehab areas. While some criteria are meeting relevant targets, further works, particularly in areas in early phases of treatment, are required to meet long term targets to establish self-sustaining ecosystems. Weed control is a significant management issue for the rehabilitation areas and the wider Hunter Valley, particularly following favourable weather conditions during the La Niña phase in 2020 – 2022. While current weed management controls are generally acceptable and in accordance with key guidelines, achieving long term performance and long-term completion criteria may require more intensive control actions.	Complies	Recommendations to achieve targets, as detailed in the Ecological monitoring reports, include: <ul style="list-style-type: none"> • More intensive weed control of High Threat Weeds; • Control of overly dominant natives (e.g Corymbia maculate, Acacia species) via thinning or changes to seed mix; and • Improved distribution of ground habitat features (such as logs); 	
	Table 9	Feature	Objective						
S3 C34	Table 9	Mine site (as a whole)	<ul style="list-style-type: none"> • Safe, stable and non-polluting • Materials (including topsoils, substrates and seeds of the disturbed areas) are recovered, appropriately managed and used effectively as resources in the rehabilitation of the site • Final landforms to: o sustain the intended land use for the post-mining domains; o be designed to minimise the visual impacts of the development; o be in keeping with the natural terrain features of the area; o be integrated with the rehabilitated landforms of surrounding mines; o backfill the gap between the two main emplacements in accordance with the dozer (and dragline) option shown on the applicable figure in Appendix 6; o incorporate micro-relief; and o incorporate drainage lines consistent with topography and natural drainage where reasonable and feasible 						
		Water Quality	<ul style="list-style-type: none"> • Water retained on site is fit for the intended land use(s) for the post-mining domains • Water discharged from site is consistent with the baseline ecological, hydrological and geomorphic conditions of the creeks prior to mining disturbance • Water management is consistent with the applicable regional catchment strategy 						
		Biodiversity	<ul style="list-style-type: none"> • Restore ecosystem function, including maintaining or establishing self-sustaining ecosystems comprising local plant species • Vegetation to be established, with the restoration of at least 1,617 hectares of Central Hunter Grey Box – Ironbark Woodland EEC • Size, location and species of native tree lots and corridors are established to sustain biodiversity habitats • Species are selected that re-establishes and complements regional and local biodiversity 						
		Surface Infrastructure	<ul style="list-style-type: none"> • To be decommissioned and removed, unless the Resources Regulator agrees otherwise 						
		Agriculture	<ul style="list-style-type: none"> • Land capability classification for the relevant nominated agricultural pursuit for each domain is established and self-sustaining within 5 years of land use establishment (first planting vegetation) 						
		Community	<ul style="list-style-type: none"> • Ensure public safety • Minimise the adverse socio-economic effects associated with mine closure 						
S3 C35	Progressive Rehabilitation	The Applicant must 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 must be employed when areas prone to dust generation cannot yet be permanently rehabilitated.	Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023			Annual Review reports detail progress of mine rehabilitation progress against MOP plans. The net rehabilitation progress (i.e. rehabilitation minus rehabilitation disturbance) for the 2015 – 2021 period was 20.4 ha higher than targets. A total of 47.9ha of new rehabilitation was completed during 2022 against a Mining Operations Plan 2022 target of 35ha. 2022 annual report notes that rehabilitation and disturbance forecasts submitted to Resources Regulator (submitted in August 2022) are based on financial year periods and therefore don't align with the calendar year Annual Review reporting period and the misalignment is intended to be corrected in the Forward Program to be submitted in May 2023.	Complies		

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Cond	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations	
S3 C36	Rehabilitation Management Plan	The Applicant must prepare a Rehabilitation Management Plan for the development to the satisfaction of the DRE and carry out the development in accordance with this plan. The plan must:	Rehabilitation Management Plan, Mount Thorley Warkworth, Version 1 dated 28 July 2022			The Rehabilitation Management Plan has been prepared.	Complies		
		a) Be submitted to the DRE for approval prior to carrying out the development under this consent.	Rehabilitation Management Plan, Mount Thorley Warkworth, Version 1 dated 28 July 2022			The latest version of the plan was submitted via email and via spatial data portal. Review by Resources Regulator remains in progress. Correspondence with RR was sighted by the Auditor	Complies		
		b) be prepared in consultation with the Department, NOW, OEH, Council and the CCC;	Rehabilitation Management Plan, Revision 1, dated 28 July 2022.			Section 4.2 of the plan details the consultation undertaken on past and the current version of the plan.	Complies		
		c) be prepared in accordance with any relevant DRE guideline, including any NSW government policy regarding voids;	Rehabilitation Management Plan, Revision 1, dated 28 July 2022.	Environment and Community Manager – the latest version of the RMP was prepared in accordance with the Resource Regulator’s Form and Way Document.			The latest version of the RMP was prepared in accordance with the Resource Regulator’s Form and Way Document.	Complies	
		d) include detailed performance and completion criteria for evaluating the performance of the rehabilitation of the site, and triggering remedial action (if necessary);	Rehabilitation Management Plan, Revision 1, dated 28 July 2022.				Section 4 of the RMP describes the performance and completion criteria.	Complies	
		e) describe the measures that would be implemented to ensure compliance with the relevant conditions of this consent, and Resources Regulator all aspects of rehabilitation including timeframes for achieving specified rehabilitation objectives;	Rehabilitation Management Plan, Revision 1, dated 28 July 2022.				Rehabilitation implementation is discussed in Section 6 of the RMP. Section 7 describes the rehabilitation quality control processes; Section 8 describes the monitoring program and Section 10 describes the intervention and adaptative management processes.	Complies	
		f) includes a mine closure strategy, that details measures to minimise the long term impacts associated with mine closure, including final landform. final land use and socioeconomic issues;	Rehabilitation Management Plan, Revision 1, dated 28 July 2022.				Section 5 of the plan describes the final landforms and rehabilitation plan	Complies	
		g) include interim rehabilitation where necessary to minimise the area exposed for dust generation;	Rehabilitation Management Plan, Revision 1, dated 28 July 2022.				The RMP does not address the interim rehabilitation of the site to minimise dust generation.	Non-compliant	Review and revise the plan to include the interim rehabilitation of the site to minimise dust generation.
		h) include a program to monitor, independently audit and report on the effectiveness of the measures, and progress against the detailed performance and completion criteria; and	Rehabilitation Management Plan, Revision 1, dated 28 July 2022.				Rehabilitation implementation is discussed in Section 6 of the RMP. Section 7 describes the rehabilitation quality control processes; Section 8 describes the monitoring program and Section 10 describes the intervention and adaptative management processes.	Complies	
		i) build to the maximum extent practicable on the other management plans required under this consent.	Rehabilitation Management Plan, Revision 1, dated 28 July 2022.					Noted	

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Cond	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
S4 C1	Notifications of Landowners / tenants	<p>Within 1 month of the date of this consent, the Applicant must:</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 Applicant to acquire their land in accordance with the procedures in conditions 5-6 below at any stage during the development; any residence on the land listed in Table 3 of schedule 3 that they have the right to request the Applicant to ask for additional noise mitigation measures to be installed at their residence at any stage during the development; and any privately-owned land within 2 kilometres of the approved open cut mining pits that they are entitled to ask for an inspection to establish the baseline condition of any buildings or structures on their land, or to have a previous property inspection report updated; 	<p>Independent Environmental Audit Report for Yancoal Mount Thorley Warkworth, Hansen Bailey, July 2020 MTW 2017 Independent Environmental Audit, 2017 Independent Audit Report, Jacobs, 8 August 2018</p>			<p>Assessed as compliant by the 2020 and 2017 Audits.</p>	Complies	
		<p>b) notify the tenants of any mine-owned land of their rights under this consent (see condition 18 of schedule 3); and</p>	<p>MTW 2017 Independent Environmental Audit, Jacobs 8 August 2018 Letter from Coal and Allied (M Rodgers) to Private Landowner titled Letter from Coal and Allied (M Rodgers) to Private Landowner titled "Landowner Notification – Mount Thorley Continuation Project Development Consent SSD-6465 Property: Lot DP in DP 7" dated 17 December 2015</p>			<p>Assessed as compliant by the 2017 Audit. Sample letters were reviewed by the Auditor that confirmed compliance with the condition</p>	Complies	
		<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 EIS identify that dust emissions generated by the development are likely to be greater than the relevant air quality criteria in schedule 3 at any time during the life of the development.</p>	<p>MTW 2017 Independent Environmental Audit, Jacobs 8 August 2018</p>			<p>Assessed as compliant by the 2017 Audit.</p>	Complies	

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Cond	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
S4 C2	Notifications of Landowners / tenants	<p>Prior to entering into any tenancy agreement for any land owned by the Applicant that is predicted to experience exceedances of the recommended dust and/or noise criteria, or for any of the land listed in Table 1 that is subsequently purchased by the Applicant, the Applicant must:</p> <p>a) advise the prospective tenants of the potential health and amenity impacts associated with living on the land, and give them a copy of the NSW Health fact sheet entitled "Mine Dust and You" (as may be updated from time to time); and</p>	<p>Residential tenancy agreement – 1 Wambo Road Bulga (ID 52961)</p> <p>Residential tenancy agreement – 1 Wambo Road Bulga (ID 46983)</p>			<p>Assessed as compliant by the 2017 Audit. A sample of tenancy agreements were reviewed. Schedule 3 of each tenancy agreement includes a "Mine dust and you" health fact sheet</p>	Complies	
		<p>b) advise the prospective tenants of the rights they would have under this consent, to the satisfaction of the Planning Secretary.</p>				<p>Assessed as compliant by the 2017 Audit. Schedule 2 of the tenancy agreements include a tenant information statement that provides details of tenants rights and obligations.</p>	Complies	
S4 C3	Notifications of Landowners / tenants	<p>As soon as practicable after obtaining monitoring results showing:</p> <p>a) an exceedance of any relevant criteria in schedule 3, the Applicant must notify affected landowners in writing of the exceedance, and provide regular monitoring results to each affected landowner until the development is again complying with the relevant criteria; and</p>	<p>Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021</p> <p>Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022</p> <p>Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023</p>			<p>There were no noise exceedances recorded during the routine monthly monitoring within the audit period.</p>	Not Triggered	
		<p>b) an exceedance of the relevant air quality criteria in schedule 3, the Applicant must send a copy of the NSW Health fact sheet entitled "Mine Dust and You" (as may be updated from time to time) to the affected landowners and/or existing tenants of the land (including the tenants of any mine-owned land).</p>	<p>Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021</p> <p>Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022</p> <p>Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023</p>			<p>There were no dust exceedances recorded during the routine monthly monitoring within the audit period.</p>	Not Triggered	

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Cond	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
S4 C4	Independent Reviews	If an owner of privately-owned land considers the development to be exceeding the criteria in schedule 3 at his/her land, then he/she may ask the Planning Secretary in writing for an independent review of the impacts of the development on his/her land.	Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023	Environment and Community Manager – No independent Reviews were requested during the audit period.		No independent Reviews were requested during the audit period.	Not Triggered	
		If the Planning Secretary is satisfied that an independent review is warranted, then the Applicant must: a) commission a suitably qualified, experienced and independent expert, whose appointment has been approved by the Planning Secretary, to: • consult with the landowner to determine his/her concerns; • conduct monitoring to determine whether the development is complying with the relevant impact assessment criteria in schedule 3; and • if the development is not complying with these criteria then: o determine if the more than one mine is responsible for the exceedance, and if so the relative share of each mine regarding the impact on the land; o identify the measures that could be implemented to ensure compliance with the relevant criteria; and	Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023	Environment and Community Manager – No independent Reviews were requested during the audit period.		No independent Reviews were requested during the audit period.	Not Triggered	
		b) give the Planning Secretary and landowner a copy of the independent review within 2 months of the Planning Secretary's decision, unless the Planning Secretary agrees otherwise.	Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023	Environment and Community Manager – No independent Reviews were requested during the audit period.		No independent Reviews were requested during the audit period.	Not Triggered	

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Cond	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations	
S4 C5	LAND ACQUISITION	<p>Within 3 months of receiving a written request from a landowner with acquisition rights, the Applicant must make a binding written offer to the landowner based on:</p> <p>a) the current market value of the landowner's interest in the land at the date of this written request, as if the land was unaffected by the development, having regard to the:</p> <ul style="list-style-type: none"> 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 noise mitigation measures in condition 3 of schedule 3; 	<p>Letter from Spark Helmore Lawyers (A McKelvey) to Yancoal (N Cook) titled "Exercise of acquisition rights under Mount Thorley Continuation Project Development Consent (SSD-6465) Property: Loders Hill, 887 Putty Road, Mount Thorley (Lot 40 in DP 1147419)</p> <p>Letter from TEW Advisory Services (R. Tew/R.Stokes) titled "Lot 5 DP10022 (Receptor K) Asset Situated proximate to Mt Thorley Operations Pty Ltd 2015 Continuation Project Development Consent (SSD 6465) "Development Consent)" dated 21 December 2022</p> <p>Letter from Costello Group Pty Ltd to Tew Property Consultants titled "Exercise of acquisition rights by Recluse Pty Ltd under Mount Thorley Continuation Project Development Consent (SSD 6465) Property: Lot 5 in DP 10022 Putty Road, Bulga New South Wales 2330, Dated 7th June 2023</p> <p>Letter from Costello Group Pty Ltd to Mr T Hedley) titled "Exercise of acquisition rights under Mount Thorley Continuation Project Development Consent (SSD 6465) Property: Loders Hill, 887 Puttt Road, Mount Thorley, NSW 2330 [Lot 40 in DP 1147419]</p>	<p>Environment and Community Manager - Written acquisition requests have been received for two properties:</p> <p>Property K – Recluse - Lot 5 DP 10022 Putty Road Bulga</p> <ul style="list-style-type: none"> AUR Request letter dated 21 December 2022. Offer tabled 7 March 2023 (Costello Group on behalf of MTO and Robert Tew valuer on behalf of Recluse Pty Ltd) Offer is made with respect to (a) to (c) Negotiations remain open and are ongoing between MTO and Recluse. <p>Property 149 – Hedley – 887 Putty Road Mount Thorley</p> <ul style="list-style-type: none"> AUR Request letter dated 12 October 2022 Offer tabled 27 February 2023. During the 3 months there was dialogue between MTO (via Costello Group) and Hedley together with dialogue between MTO (via Minter Ellison lawyers) to Sparke Helmore lawyers (on behalf of Hedley) In the ongoing discussions with Hedley since there has been no issues raised in regard to the timing of any offer. Negotiations remain open and are ongoing between MTO and Hedley. <p>Neither property is in dispute</p>			<p>Yancoal have been approached by the owners of two properties identified in Table 1. These are:</p> <ul style="list-style-type: none"> Property 149(Noise) Property K (Air) <p>Notices were issued in late 2022. The acquisition process will take some time, discussions with both property owners are ongoing. As such these properties are yet to be acquired by Yancoal. Neither properties are in dispute.</p>	Complies	
		<p>b) the reasonable costs associated with:</p> <ul style="list-style-type: none"> relocating within the Muswellbrook, Singleton or Cessnock local government area, or to any other local government area determined by the Planning Secretary; and obtaining legal advice and expert advice for determining the acquisition price of the land, and the terms upon which it is to be acquired; and 					The current round of acquisitions is in progress.	Noted	
		<p>c) reasonable compensation for any disturbance caused by the land acquisition process.</p>					The current round of acquisitions is in progress.	Noted	
		<p>However, if at the end of this period, the Applicant and landowner cannot agree on the acquisition price of the land and/or the terms upon which the land is to be acquired, then either party may refer the matter to the Planning Secretary for resolution.</p>					The current round of acquisitions is in progress.	Noted	
S4 C6	Land Acquisition	<p>The Applicant must pay all reasonable costs associated with the land acquisition process described in condition 5 above, including the costs associated with obtaining Council approval for any plan of subdivision (where permissible), and registration of this plan at the Office of the Registrar-General.</p>					The current round of acquisitions is in progress.	Noted	

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Cond	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
S5 C1	Environmental Management Strategy	The Applicant must prepare an Environmental Management Strategy for the development to the satisfaction of the Planning Secretary and carry out the development in accordance with this strategy. The strategy must:	Environmental Management Strategy, Mt Thorley Warkworth, Revision 2.1 dated 28/7/2022 Letter from DPE (M S Prutt) to Warkworth Mining (G. Mulhearn) titled "Mount Thorley Continuation Project (SSD 6465) Warkworth Continuation Project (SSD 6464) Environmental Management Strategy" dated 20 July 2021			The strategy provides a suitable strategic framework for the environmental management of the development and was approved by the Planning Secretary on the 20 July 2021.	Complies	
		a) be submitted to the Planning Secretary for approval prior to carrying out any development under this consent;	Environmental Management Strategy, Mt Thorley Warkworth, Revision 2.1 dated 28/7/2022			The strategy provides a suitable strategic framework for the environmental management of the development	Complies	
		b) provide the strategic framework for environmental management of the development;	Environmental Management Strategy, Mt Thorley Warkworth, Revision 2.1 dated 28/7/2022			Section 5 and Table 1 summarize the Statutory Approvals for the Development	Complies	
		c) identify the statutory approvals that apply to the development;	Environmental Management Strategy, Mt Thorley Warkworth, Revision 2.1 dated 28/7/2022			Sections 6.3- 6.6 of the Plan includes Information relating to:	Complies	
		d) describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the development;	Environmental Management Strategy, Mt Thorley Warkworth, Revision 2.1 dated 28/7/2022			- Information dissemination - The role of the Community Consultative Committee - Provision of information via the project website - Community Complaints Management - Dispute Resolution - Emergencies	Complies	
		e) describe the procedures that would be implemented to:	Environmental Management Strategy, Mt Thorley Warkworth, Revision 2.1 dated 28/7/2022			Appendix C of the Strategy includes the Plans, strategies and programs that are required by both SSD 6464 and SSD 6465 with a reference to the MTW website and Includes:	Complies	
		<ul style="list-style-type: none"> keep the local community and relevant agencies informed about the operation and environmental performance of the mine development; receive, handle, respond to, and record complaints; resolve any disputes that may arise; respond to any non-compliance; respond to emergencies; and 			<ul style="list-style-type: none"> Noise Management Plan Blast Management Plan Water Management Plan Aboriginal Heritage Management Plan Wollombi Brook Aboriginal Cultural Heritage Area Conservation Area Plan of Management Historic Heritage Management Plan Rehabilitation Management Plan Biodiversity Management Plan Pollution Incident Response Management Plan 	Complies		
		f) include:	Environmental Management Strategy, Mt Thorley Warkworth, Revision 2.1 dated 28/7/2022			Appendix C of the Strategy includes the approved Plans, strategies and programs that are required by both SSD 6464 and SSD 6465 with a reference to the MTW website. Including:	Complies	
		<ul style="list-style-type: none"> copies of any strategies, plans and programs approved under the conditions of this consent; and a clear plan depicting all the monitoring required to be carried out under the conditions of this consent. 				<ul style="list-style-type: none"> Noise Management Plan Blast Management Plan Water Management Plan Aboriginal Heritage Management Plan Wollombi Brook Aboriginal Cultural Heritage Area Conservation Area Plan of Management Historic Heritage Management Plan Rehabilitation Management Plan Biodiversity Management Plan Pollution Incident Response Management Plan 	Complies	

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Cond	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
S5 C2	Adaptive Management	<p>The Applicant must assess and manage development-related risks to ensure that there are no exceedances of the criteria and/or performance measures in schedule 3. Any exceedance of these criteria and/or performance measures constitutes a breach of this consent and may be subject to penalty or offence provisions under the EP&A Act or EP&A Regulation.</p> <p>Where any exceedance of these criteria and/or performance measures has occurred, the Applicant must, at the earliest opportunity:</p> <p>a) take all reasonable and feasible steps to ensure that the exceedance ceases and does not recur;</p>	<p>Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021</p> <p>Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022</p> <p>Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023</p>			<ul style="list-style-type: none"> Examples of Adaptive Management Actions taken during the audit period: noise exceedance – new handheld monitor purchased and tool developed to enable identification of low frequency noise for supplementary noise readings. -blast exceedance – review of property ownership information to identify residences on privately owned land, and then update of Blast Management Plan to reflect this. -water management – refer DPE correspondence folder regarding Action Plan for MTO sediment basin at various dates in the audit period, which is intended to divert rehabilitation runoff through a sediment basin and then offsite. 	Complies	
		<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 course of action; and</p>	<p>Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021</p> <p>Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022</p> <p>Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023</p>				Complies	
		<p>c) implement remediation measures as directed by the Planning Secretary.</p>	<p>Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021</p> <p>Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022</p> <p>Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023</p>	<p>Environment and Community Manager - No directions issued by DPE for remedial actions during the audit period.</p>		<p>No directions issued by DPE for remedial actions during the audit period.</p>	Not Triggered	

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Cond	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
S5 C3	Management Plan Requirements	The Applicant must ensure that the management plans required under this consent are prepared in accordance with any relevant guidelines, and include:	Environmental Management Plans including: - Environmental Management Strategy - Air Quality Management Plan - Water Management Plan - Blast Management Plan - Social Impact Management Plan - Pollution Incident Response Management Plan - Rehabilitation Management Plan - Biodiversity Management Plans (various) - Aboriginal Heritage Management plan - Historic Heritage Management Plan			Baseline data is provided in Section 4 of the various management plans (Existing Character) where applicable	Complies	
		a) detailed baseline data;						
		b) a description of: <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; 				The management plans include the relevant statutory/ approval requirements as well as criteria to be achieved	Complies	
		c) a description of the measures that would be implemented to comply with the relevant statutory requirements, limits, or performance measures/criteria;				The management plans include details of management and mitigation options.	Complies	
		d) a program to monitor and report on the: <ul style="list-style-type: none"> impacts and environmental performance of the development; effectiveness of any management measures (see c above); 				The management plans include monitoring programs to evaluate the effectiveness of any management measures.	Complies	
		e) a contingency plan to manage any unpredicted impacts and their consequences;				The management plans include monitoring programs to evaluate the effectiveness of any management measures and contingency planning.	Complies	
		f) a program to investigate and implement ways to improve the environmental performance of the development over time;		- Environmental Management Strategy		Adaptive management process is provided in the EMS.	Complies	
		g) protocol for managing and reporting any: <ul style="list-style-type: none"> incidents; complaints; non-compliances with statutory requirements; and exceedances of the impact assessment criteria and/or performance criteria; and 		- Environmental Management Strategy		Various sections of the Environmental Management Strategy describe the relevant processes as follows: - Incidents (Section 7.5) - Complaints (Section 6.5) - Non compliances (Section 7.4) - Exceedances (Sections 7.3 /7.4)	Complies	
h) a protocol for periodic review of the plan.	- Environmental Management Strategy		Section 8 of the Environmental Management Strategy describes the process for Review of the Environmental Management Strategy as well as any other subordinate strategies, plans and programs described by the development consents.	Complies				

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Cond	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
S5 C4	Annual Review	By the end of March each year, the Applicant must review the environmental performance of the development for the previous calendar year to the satisfaction of the Planning Secretary. This review must:	<p>Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021</p> <p>Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022</p> <p>Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023</p> <p>2019</p> <p>Letter from Yancoal (G.Mulhearn) to DPE (Ann Hagerthy) titled " Mt Thorley Warkworth SSD 6464 and SSD Annual Review Report" dated 31 March 2020</p> <p>Letter from DPE (H.Watters) to Yancoal Australasia (G. Mulhearn) titled " Mt Thorley Warkworth Complex – SSD 6464 (Continuation Project) and SSD 6465 (Mount Thorley Continuation Project) Annual Review 2019 dated 17 June 2020</p> <p>2020</p> <p>DPE Post Approval form reference Schedule 5 Condition 4 dated 29 April 2021</p> <p>Letter from DPE (H.Watters) to Yancoal Australasia (G. Mulhearn) titled " Mt Thorley Warkworth SSD 6464 and SSD Annual Review 2020 dated 2 November 2021</p> <p>2021</p> <p>Email from DPE (Major Projects) to Yancoal (G. Mulhearn), 6 April 2022</p> <p>Letter from DPE (H. Watters) to Yancoal (G. MULhearn) titled " Warkworth Continuation (SSD -6464) and Mt Thorley Continuation (SSD-6465) 2021 Annual Review – Request for Additional Information" dated 20, June 2022</p> <p>Letter from DPE (H. Watters) titled "Warkworth Continuation – 2021 Annual Review (SSD – 6464)" dated 10 October 2022</p> <p>2022</p> <p>Letter from Yancoal (G.Mulhearn) to DPE (H.Watters) titled "Mt Thorley Warkworth Complex (SSD-6464 and SSD – 6465) Annual Review Report</p> <p>Letter from DPE (H. Watters) to Yancoal (G. MULhearn) titled "Warkworth Continuation – Extension Request – 2022 Annual Review (SSD 6464) Extension of Time to Type of Request" dated 28 March 2023</p>			<p>2019 Annual Review</p> <ul style="list-style-type: none"> lodged with DPE on the 31 March 2020 endorsed by DPE on the 17 June 2020 <p>2020 Annual Review</p> <ul style="list-style-type: none"> lodged with DPE on the 29 April 2021 endorsed by DPE on the 2nd of November 2021 An extension of time was granted by DPE to lodge the Annual Review by 31st of April 2021 <p>2021 Annual Review</p> <ul style="list-style-type: none"> lodged with DPE on the 31st of March 2022 DPE requested additional information on 20 June 2022 endorsed by DPE on the 10 October 2022 <p>2022 Annual Review</p> <ul style="list-style-type: none"> Extension of time requested on 27 March 2023 to lodge AR on 1 May 2023 Approval for extension of time to 1 May 2023 granted by DPE Lodged with DPE on 1 May 2023 DPE advised on 2 May 2023 of their commencement of their detailed assessment Annual review is yet to be endorsed by DPE 	Complies	

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Cond	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
S5 C4	Annual Review	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;	Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023			Section 4 of each Annual Review summarises the following activities undertaken during the audit period: <ul style="list-style-type: none"> • Mining activities • Mineral Processing • Production statistics • Summary of changes (development and equipment upgrades) Section 7 and Appendix 8 of each Annual Review provides a comprehensive summary of rehabilitation activities undertaken	Complies	
		b) include a comprehensive review of the monitoring results and complaints records of the development over the past year, which includes a comparison of these results against the: <ul style="list-style-type: none"> • relevant statutory requirements, limits or performance measures/criteria; • monitoring results of previous years; and • relevant predictions in the EIS; 	Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023			Section 6 of each Annual Review provides a comprehensive review of the monitoring results, including meteorological data, noise, blasting, air quality, water and waste. Section 8 of each Annual Review provides a summary of complaints, communications and community engagement activities. A comparison against the predictions in the EA are made for noise and dust (refer to Tables 6.5 (noise) and 6.7 (dust)). Surface water monitoring results are assessed against trigger limits	Complies	
		c) identify any non-compliance over the last year, and describe what actions were (or are being) taken to ensure compliance;	Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023			Section 10 of each Annual Review provides details of incidents and noncompliance as well as activities to be completed in the next year	Complies	
		d) identify any trends in the monitoring data over the life of the development;	Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023			Long term monitoring trends are graphically presented in figures throughout the document.	Complies	
		e) identify any discrepancies between the predicted and actual impacts of the development, and analyse the potential cause of any significant discrepancies; and	Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023			Section 6 of each Annual Review provides a comprehensive review of the monitoring results, including meteorological data, noise, blasting, air quality, water and waste. Section 8 of each Annual Review provides a summary of complaints, communications and community engagement activities. A comparison against the predictions in the EA are made for noise and dust (refer to Tables 6.5 (noise) and 6.7 (dust)). Surface water monitoring results are assessed against trigger limits	Complies	
		f) describe what measures will be implemented over the next year to improve the environmental performance of the development.	Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2021 Annual Review, 1 May 2023			Section 11 provides details of actions to be completed over the next reporting period to improve the environmental performance	Complies	

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Cond	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
S5 C5	Revision of Strategies, Plans and Programs	<p>Within 3 months of:</p> <p>a) the submission of an:</p> <ul style="list-style-type: none"> • annual review under condition 4 above; • incident report under condition 7 below; • audit report under condition 9 below; or 	Environmental Management Plans Review Register 2020			Detailed registers of document reviews are maintained by Yancoal to plan and track document reviews.	Complies	
		<p>b) any modification to the conditions of this consent (unless the conditions require otherwise), or</p>	Environmental Management Plans Review Register 2021					
		<p>c) the introduction of any NSW government policy regarding voids, the Applicant must review, and if necessary revise, the strategies, plans, and programs required under this consent to the satisfaction of the Planning Secretary.</p>	Environmental Management Plans Review Register 2022					
		<p>d) Where this review leads to revisions in any such document, then within 4 weeks of the review, unless the Planning Secretary agrees otherwise, the revised document must be submitted to the Planning Secretary for approval.</p> <p>Note: This is to ensure the strategies, plans and programs are updated on a regular basis, and incorporate any recommended measures to improve the environmental performance of the development.</p>	<p>Letter from Yancoal (G.Mulhearn) to DPE (M Sprott) titled "Mount Thorley Warkworth updated Water Management Plan" dated 20 December 2019</p> <p>Letter from DPE (M Sprott) to Yancoal (G Mulhearn) titled "Mount Thorley Water Management Plan, dated 13 May 2020</p> <p>Letter from DPE (J Fittell) to Yancoal (G.Mulhearn) titled "Mt Thorley Continuation Project (SSD -6465) and Warkworth Continuation Project SSD (6464) dated 8 August 2022</p>			Examples were provided which confirmed DPE had reviewed and approved management plans during the audit period	Complies	
S5 C6	Community Consultative Committee	The Applicant must operate a Community Consultative Committee (CCC) for the development to the satisfaction of the Planning Secretary. This CCC must be operated in accordance with the Guidelines for Establishing and Operating Community Consultative Committees for Mining Projects (Department of Planning, 2007, or its latest version). It may also be combined with any CCC for the Warkworth mine.	<p>MTW Website</p> <p>Community - MOUNT THORLEY WARKWORTH COAL OPERATIONS LIMITED (mtwcoal.com.au)</p>			The current Mount Thorley Warkworth Community consultative committee comprises an independent chair, the MTW General Manager, Environment Manager, Singleton Shire Council , Singleton Shire Healthy Environment Group and members of the local community. A copy of the CCC guidelines are provided on the MTW website along with the minutes of CCC meetings from 2016 - 2023	Complies	

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Cond	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations			
S5 C7	Reporting	The Applicant must immediately notify the Planning Secretary and any other relevant agencies of any incident. Within 7 days of the date of the incident, the Applicant must provide the Planning Secretary and any relevant agencies with a detailed report on the incident, and such further reports as may be requested.	Reportable Incident Correspondence	The following incidents have been notified to the Planning Secretary relating to the Mt Thorley Operations						Complies	
				Incident Date	DPE Notification Date	Other Agencies Notification date	DPE Report date	Incident Type	Note		
				14/5/20	14/5/20	14/5/29	21/5/20	Water discharge	EPA – Official Caution		
				1/1/19 – 31/12/19	29/5/20	29/5/20	16/6/20	Blasting exceedance	Exceedances occurred over a 12-month period		
				4/1/21	4/1/21	4/1/21	29/1/21	Water Discharge	DPE report late. EPA and DPE Show Cause letters EPA Penalty Notice DPE Penalty Notice		
5/7/22	5/7/22	5/7/22	5/7/22	Water Discharge							
S5 C8	Regular Reporting	The Applicant must provide regular reporting on the environmental performance of the development on its website, in accordance with the reporting arrangements in any plans or programs approved under the conditions of this consent.	MTW Website Mount Thorley Warkworth Coal (mtwcoal.com.au)			The MTW website includes monthly environmental monitoring reports as well as real time data for air quality, noise and complaints.	Complies				

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Cond	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations	
S5 C9	Independent Environmental Audit	Within 1 year of the commencement of development under this consent. and every 3 years thereafter, unless the Planning Secretary directs otherwise, the Applicant must commission and pay the full cost of an Independent Environmental Audit of the development. This audit must:	Independent Environmental Audit Report for Yancoal Mount Thorley Warkworth, Hansen Bailey, July 2020 Mt Thorley Warkworth Complex (SSD-6464 and SSD -6465) Independent Audit 2020 – Responses to Audit Recommendations MTW 2017 Independent Environmental Audit, 2017 Independent Audit Report, Jacobs, 8 August 2018 Response to Non – Compliances and Recommendations MTW IEA 2017 (Rev C) 2016 Independent Environmental Audit, Mt Thorley and Warkworth Operations, Peter Horn, 12 May 2016				Independent audits were undertaken in 2016, 2017, 2020 and 2023 (this audit) The 2023 audit has been undertaken within 3 years of the previous (2020 audit)	Complies	
		a) be conducted by a suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Planning Secretary;	Independent Environmental Audit Report for Yancoal Mount Thorley Warkworth, Hansen Bailey, July 2020 Letter from DPE (H. Watters) to Yancoal (G. Mulhearn) titled “Mt Thorley Warkworth Complex (SSD 6464 and SSD 6465) – 2020 Independent Environmental Audit” dated 24 February 2020				The previous audit was undertaken by Hansen Bailey, the audit team, were approved by DPE on the 24 February 2020	Complies	
		b) include consultation with the relevant agencies;	Independent Environmental Audit Report for Yancoal Mount Thorley Warkworth, Hansen Bailey, July 2020				Agency consultation is summarized in Section 3.3 with full records of consultation provided in Appendix A	Complies	
		c) assess the environmental performance of the development and assess whether it is complying with the requirements in this consent and any relevant EPL or Mining Lease (including any assessment, plan or program required under these approvals);	Independent Environmental Audit Report for Yancoal Mount Thorley Warkworth, Hansen Bailey, July 2020				Section 6 of the audit report provides details of non-compliances with the project conditions of consent including the EPL and the mining lease	Complies	
		d) include an assessment - undertaken by an independent expert whose appointment has been endorsed by BCD - of the progress towards implementation of the biodiversity offset strategy in particular the regeneration of the Warkworth Sands Woodland against the detailed performance and completion criteria under the Biodiversity Management Plan (see condition 36 of schedule 3);	Letter from DPE (H.Watters) to Yancoal (G.Mulhearn) titled “Mt Thorley Warkworth Complex (SSD 6464 and 6465)- 2020 Independent Environmental Audit dated 24 February 2020				WSP are the nominated ecologist and were endorsed by DPE. The assessment undertaken to address this condition is included in Appendix F of the 2020 IEA.	Complies	
		e) review the adequacy of strategies, plans or programs required under the abovementioned approvals; and	Independent Environmental Audit Report for Yancoal Mount Thorley Warkworth, Hansen Bailey, July 2020				Section 4 and Appendix E of the 2020 IEA address this requirement	Complies	
		f) recommend appropriate measures or actions to improve the environmental performance of the development, and/or any assessment, plan or program	Independent Environmental Audit Report for Yancoal Mount Thorley Warkworth, Hansen Bailey, July 2020				Section 7 (Table 8) of the 2020 independent environmental audit provides a series of recommendations aimed at improving the environmental performance.	Complies	

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Cond	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
		required under the above-mentioned approvals.						
S5 C10	Independent Environmental Audit	Within 6 weeks of the completion of this audit, unless the Planning Secretary agrees otherwise, the Applicant must submit a copy of the audit report to the Planning Secretary, together with its response to any recommendations contained in the audit report.	Letter from DPE (H. Watters) to Yancoal (G. Mulhearn) titled "Mt Thorley Warkworth Complex (SSD 6464 and SSD 6465) 2020 Independent Environmental Audit" dated 16 June 2020 Letter from DPE (H. Watters) to Yancoal (G. Mulhearn) titled "Mount Thorley and Warkworth Complex (SSD 6464 and SSD – 6465) Independent Environmental Audit dated 10 July 2020				DPE granted an extension of time for the submission of the 2020 audit report to the 17 July 2020..	Complies
S5 C11	ACCESS TO INFORMATION	From the commencement of development under this consent, the Applicant must: (a) make the following information publicly available on its website: <ul style="list-style-type: none"> the EIS; current statutory approvals for the development; approved strategies, plans or programs required under the conditions of this consent; a comprehensive summary of the compliance monitoring results of the development, reported in accordance with the specifications in any conditions of this consent, or any approved plans and programs; the results of real time noise monitoring, updated daily (unless otherwise agreed by the Planning Secretary); a complaints register, which is to be updated monthly; minutes of CCC meetings; the last five annual reviews of the development (for the last 5 years, if applicable); any independent environmental audit; and the Applicant's response to the recommendations in any audit; any other matter required by the Planning Secretary; and (b) keep this information up to date;	Yancoal, Mt Thorley Website Mount Thorley Warkworth Coal (mtwcoal.com.au)	Environment and Community Manager- Annual Review for 2022 is currently with DPE for approval and MTW policy is to upload the document to the website once it has been approved		<ul style="list-style-type: none"> The website includes the following documents: <ul style="list-style-type: none"> Environmental Impact Assessment Project Modifications Environmental Management Strategy and Plans including: <ul style="list-style-type: none"> Environmental Management Strategy Air Quality Management Noise Management Waste Management Blast Management Pollution Incident Response Management Rehabilitation Biodiversity Indigenous and Cultural Heritage Statutory Approvals including: <ul style="list-style-type: none"> SSD 6465 Mt Thorley Continuation Development Consent EPL 1976 Mount Thorley Operations Pty Ltd EPBC 2009/5081 EPBC 2002/629 Monthly environmental monitoring reports that include annual complaints register Community consultative committee meeting minutes Annual Review reports dated from 2016 to 2021. The 2022 AR was not loaded onto the website, however Yancoal noted that it is policy not to provide the AR on the website until it is approved by DPE (approval pending) Independent Audits and response to audit findings for years 2016 to 2020 	Complies	

Compliance Register EPL 1376

Warkworth Mine

Appendix A3

Environment Protection Licence (EPL 1376) Warkworth Mining Ltd									
Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations	
A1.1	What the Licence Authorises and Regulates	This licence authorises the carrying out of scheduled activities listed below at the premises specified in A2. The activities are listed according to their scheduled activity classification, fee-based activity classification and the scale of the operation. Unless otherwise further restricted by condition of this licence, the scale at which the activity is carried out must not exceed the maximum scale specified in this condition.	Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023			Table 4.1 of each Annual Review documents the following tonnages of ROM coal extracted: <ul style="list-style-type: none"> 2020 – 16.6 2021 – 16.08 2022 – 12.41 The recorded tonnages are less than the maximum tonnage prescribed by this condition.	Complies		
	Table A1.1	Scheduled Activity	Fee Based Activity	Scale					
		Coal Works	Coal Works	>5000000T annual handling capacity					
		Crushing, Grinding or Separating	Crushing, Grinding or Separating	>1000000-500000 T annual processing capacity					
What the Licence Authorises and Regulates	Note: In relation to this licence, the licensee must comply with:					Refer to audit schedules for SSD 6464 (S2 C6 and S2 C7)	Complies		
	a) The activity scale limits imposed by the licence;					Refer to audit schedules for SSD 6464 (S2 C6 and S2 C7)	Complies		
	b) The activity scale limits which apply for the reporting period specified in this licence; and					Refer to audit schedules for SSD 6464 (S2 C6 and S2 C7)	Complies		
A 2.1	Premises or Plant to Which this Licence Applies	The Licence Applies to the following Premises					Noted		
	Table A2.1	Premises Details Warkworth Coal Mine - Putty Road Mt Thorley, NSW 2330	Premises defined by plan titled "Warkworth mining ltd – EPL 1376" including EPL boundary coordinates dated 16/10/2018 EPA Reference doc18/780507-06						
A 3.1	Other Activities	This licence applies to all other activities carried on at the premises, including;					Noted		
	Table A3.1	Ancillary Activity Sewage Treatment Systems							
A 4.1	Information Supplied to the EPA	Works and activities must be carried out in accordance with the proposal contained in the licence application, except as expressly provided by a condition of this licence. In this condition the reference to "the licence application" includes a reference to:					Noted		
		a) The applications for any licence (including former pollution control approvals) which this licence replaces under the <i>Protection of the Environment Operations (Savings and Transitional) Regulation 1998</i> ; and b) The licence information form provided by the licensee to the EPA to assist the EPA in connection with the issuing of this licence.							

Environment Protection Licence (EPL 1376) Warkworth Mining Ltd

Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
P.1.1	Location of Monitoring / Discharge Points and Areas	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.					Noted	
	Table P1.1	EPA identification	Type of Monitoring Point	Location Description				
		9	Particulate Matter Monitoring	Monitor "WML North Pit" at coordinates 316450, 6392620 (Easting Northing) identified as point 9 on Figure 1.				
		10	Particulate Matter Monitoring	Monitor "Dragline Crossing" at coordinates 318679, 6388113 (Easting Northing) identified as point 10 on Figure 1.				
		11	Particulate Matter Monitoring	Monitor "Heavy Vehicle Bridge" at coordinates 320800 6387890 (Easting Northing) identified as point 11 on Figure 1				
		12	Particulate Matter Monitoring	Monitor "MTIE" at coordinates 321656, 6388797 (Easting Northing) identified as point 12 on Figure 1.				
P1.2	Location of Monitoring /Discharge Points and Areas	The following utilisation areas referred to in the table below are identified in this licence for the purposes of the monitoring and/ or setting of limits for any application of solids or liquids to the utilisation area.					Noted	
P1.3	Location of Monitoring /Discharge Points and Areas	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					Noted	
	Table P1.3	EPA Identification Number	Type of Monitoring Point	Type of Discharge Point	Location Description			
		1	Hunter River Salinity Trading Scheme (HRSTS) discharge water volume monitoring and water quality monitoring	Hunter River Salinity Trading Scheme (HRSTS) discharge water volume monitoring and water quality monitoring	HRSTS discharge point at co-ordinates 320890, 6391530 (Easting, Northing) identified as point 1 on Figure 1.			
		14	Effluent quality monitoring, Discharge to utilisation area	Effluent quality monitoring, Discharge to utilisation area	North Pit North Crib Hut Envirocycle at co-ordinates 316432, 6392431 (Easting, Northing) identified as point 3 on Figure 2.			
		15	Effluent quality monitoring, Discharge to utilisation area	Effluent quality monitoring, Discharge to utilisation area	Main Warkworth Staging Pond at co-ordinates 321362, 6389974 (Easting, Northing) identified as point 13 on Figure 2.			
		16	Effluent quality monitoring		Warkworth Admin envirocycle at co-ordinates 321615, 6389665 (Easting, Northing) identified as point 6 on Figure 2			
		17	Effluent quality monitoring		West Pit South crib hut envirocycle at co-ordinates 318212, 6387979(Easting, Northing) identified as point 1 on Figure 2.			
		18	Effluent quality monitoring		Warkworth medical centre envirocycle at co-ordinates 321477, 6389686 (Easting, Northing) identified as point 10 on Figure 2			
		24		Discharge to pipe	Transfer of mine water to Hunter Valley Operations (HVO) EPL 640 at 317688, 6393339 Easting, Northing)			
		25	Water Quality Monitoring		Continuous turbidity monitor at co-ordinates 320846, 6391510 (Easting, Northing) in staged discharge dam near to the points at which water is discharged from EPA Point 1, shown in DOC20/83395.			
		26	Ambient water quality monitoring		Hunter River at Co-ordinates 324425, 6390600 (Easting, Northing) shown as W1 on Figure 3.			
		27	Ambient water quality monitoring		Hunter River at co-ordinates 324291, 6390530 (Easting, Northing) shown as W2 on Figure 3.			
		28	Ambient water quality monitoring		Hunter River at co-ordinates 324650, 6390530 (Easting, Northing) shown as W3 on Figure 3.			
		29	Ambient water quality monitoring		Loders Creek at co-ordinates 323505, 6386553 (Easting, Northing) shown as W5 on Figure 3			
		30	Ambient water quality monitoring		Dights Creek at co-ordinates 318909, 6393389 (Easting, Northing) shown as WW5 on Figure 3.			
		31	Ambient water quality monitoring		Wollombi Brook Downstream at co-ordinates 311914, 6391104 (Easting, Northing) shown as SW40 on Figure 3.			
		32	Ambient water quality monitoring		Wollombi Brook at co-ordinates 314419, 3691104 (Easting, Northing) shown as Wollombi Brook on Figure 3.			
33	Ambient water quality monitoring		Wollombi Brook upstream at co-ordinates 316712, 6385125 (Easting, Northing) shown as Wollombi Brook Upstream on Figure 3.					
P1.3	Location of Monitoring /Discharge Points and Areas	The following points referred to in the table are identified in this licence for the purposes of the monitoring and/ or the settling of limits for discharges or pollutants to water from this point.					Noted	

Environment Protection Licence (EPL 1376) Warkworth Mining Ltd								
Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
P 1.4	Location of Monitoring /Discharge Points and Areas	The following points referred to in the table below are in this licence for the purposes of weather and/ or noise monitoring and/ or setting limits for the emission of noise from the premises.					Noted	
	Table P1.4	EPA Number	Type of Monitoring Point	Location Description				
		4	Air blast overpressure & ground vibration peak particle velocity monitoring	Blast monitor "Warkworth" at coordinates 314311, 6394906 (Easting, Northing) identified as point 4 on Figure 1.				
		5	Air blast overpressure & ground vibration peak particle velocity monitoring	Blast monitor "Wambo Road" at coordinates 313263, 6388714 (Easting, Northing) identified as point 5 on Figure 1.				
		6	Air blast overpressure & ground vibration peak particle velocity monitoring	Blast Monitor "Bulga Village" at coordinates 314252, 6385592 (Easting, Northing) identified as point 6 on Figure 1.				
		7	Air blast overpressure & ground vibration peak particle velocity monitoring	Blast monitor "Wollemei Peak Road" at coordinates 315133, 6384578 (Easting, Northing) identified as point 7 on Figure 1.				
		8	Air blast overpressure & ground vibration peak particle velocity monitoring	Blast monitor "Putty Road - MTIE" at coordinates 322584, 6389730 (Easting, Northing) identified as point 8 on Figure 1				
13	Meteorological Station to determine meteorological conditions for noise monitoring	Charlton Ridge weather station at coordinates 318484, 6387405 (Easting, Northing) identified as M4.1 on Figure 1.						
P1.5	Location of Monitoring /Discharge Points and Areas	Figure 1 in conditions P1.1, P1.3 and P1.4 refers to plan titled "Warkworth Mining Ltd. EPL 1376" Monitoring Points dated 16/10/2018 EPA Reference DOC18/780507-06..					Noted	
P1.6	Location of Monitoring /Discharge Points and Areas	Figure 2 in conditions P1.3 refers to plan titled "Warkworth Mining Ltd. EPL 1376 Sewage Treatment Systems" dated 20/11/19 EPA Reference DOC19/899218-3.					Noted	
P1.7	Location of Monitoring /Discharge Points and Areas	Figure 3 in condition P1.3 refers to plan titled "EPL 1376 Ambient Surface Water Monitoring Locations" dated 29/1/2020 in EPA Reference DOC20/83395.					Noted	
P 1.8	Location of Monitoring /Discharge Points and Areas	The datum for grid references in this licence is the Geodetic Datum of Australia 1994 (GDA94), Zone 56					Noted	
L1.1	Pollution of Waters	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.	Annual Return (AR) Non-Compliance Detail Licence Number 1376, 01 Dec 2021 – 30 November 2022 (EPA Website) Annual Return Non-Compliance Detail Licence Number 1376, 01 Dec 2020 – 30 November 2021 (EPA Website) Annual Return Non-Compliance Detail Licence Number 1376, 01 Dec 2019 – 30 November 2020 (EPA Website)			The following non-compliances (generally associated with over topping of dams) were identified by the Annual Returns <ul style="list-style-type: none"> WML Sediment Dams 53N, 54N and WML sump 5N overtopped as a result of heavy rainfall - 5 in total non-compliances reported (2022 AR) WML Sediment Dams 53N, 54N, 55N, 46 N SSD09 - 4 in total (2021 AR) Discharge from 9S via spillway to Loders Creek (2021 AR) WML sediment dams 50N and 53N overtopped as a result of heavy rainfall 	Non-compliant	A risk assessment and review of the storage capacity of the retention dams be undertaken that takes into account the increasing risk of extreme weather events, including extended duration wet weather patterns.
L2.1	Concentration Limits	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.	Annual Return – Warkworth Mining Ltd, Licence 1376 dated 27 January 2021 Annual Return – Warkworth Mining Ltd, Licence 1376 dated 27 January 2022 Annual Return – Warkworth Mining Ltd, Licence 1376 dated 23 January 2023			Recorded values as documented in Section B3 of each Annual Return comply with the both the pH and TSS limits in this table.	Complies	
L2.2	Concentration Limits	Where a pH quality limit is specified in the table, the specified percentage of samples must be within the specified ranges.					Complies	

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Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations	
L2.3	Concentration Limits	To avoid any doubt, this condition does not authorise the pollution of waters by any pollutant other than those specified in the table/s.					Noted		
L2.4	Concentration Limits	Water and/ or Land Concentration Limits.							
	Table L2.4	Point 1							
		Pollutant	Units of Measure	100 percentile concentration					
		pH	pH	6.5-9.5					
		TSS	Milligrams per litre	120					
L3.1	Volume and Mass Limits	For each discharge point or utilisation area specified below (by a point number), the volume/ mass of: a) Liquids discharged to water; or	Annual Return – Warkworth Mining Ltd, Licence 1376 dated 27 January 2021 Annual Return – Warkworth Mining Ltd, Licence 1376 dated 27 January 2022			Monitoring Point 1 relates to the HRTS discharge point, as noted in Section B3 of each Annual Return, there were no HRTS discharges during the audit period.	Complies		
		b) Solids or liquids applied to the area; must not exceed the volume/ mass limit specified for that discharge point or area.	Annual Return – Warkworth Mining Ltd, Licence 1376 dated 23 January 2023				Complies		
L3.1	Table L3.1								
		Point	Unit of Measure	Volume /Mass Limit					
		1	Megalitres per day	100					
	Waste	The licensee must not cause, permit or allow any waste to be received at the premises, except the wastes expressly referred to in the column titled "Waste" and meeting the definition, if any, in the column titled "Description" in the table below. Any waste received at the premises must only be used for the activities referred to in relation to that waste in the column titled "Activity" in the table below. Any waste received at the premises is subject to those limits or conditions, if any, referred to in relation to that waste contained in the column titled "Other Limits" in the table below.		Environment and Community Manager – No wastes are received from any off-site sources.	No evidence of the storage of wastes from other sites was observed during this IEA.	Waste (other than those approved by this condition) is not received at the Premises	Complies		
L4.1	Table	Waste	Description	Activity	Other Limits				
		Biosolids categorised as unrestricted use, or as restricted use 1, 2 or 3, in accordance with the criteria set out in the biosolids guidelines	Soil amendment for rehabilitation of mining land		The Licensee must comply with the Biosolids Exemption 2014				
		Fly ash	Dry phase coal ash from Redbank Power Station for use as soil amendment and in rehabilitation of mine	As specified in each particular resource recovery exemption	The coal ash exemption 2017 must be complied with.				
		Stormwater	To be used for dust mitigation and other mining purposes	As specified in each particular resource recovery exemption	The stormwater exemption 2014 must be complied with.				
		Coal Washery Reject	To be applied to land for rehabilitation of coal mine	As specified in each particular resource recovery exemption	The Mount Thorley -Warkworth Operations Exemption 2010 must be complied with.				
		Excavated natural material	Overburden from mining at MTO Complex to create final landforms	As specified in each particular resource recovery exemption	The Excavated natural material exemption 2014 must be complied with.				
		Gypsum plaster board	Soil amendment for rehabilitation of mining land	As specified in each particular resource recovery exemption	The Recovered plasterboard exemption 2014 must be complied with.				
Compost (The compost exemption 2016-NSW EPA)	Soil amendment for rehabilitation of mining land	As specified in each particular resource recovery exemption	The Compost Exemption 2016 must be complied						

Environment Protection Licence (EPL 1376) Warkworth Mining Ltd								
Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
L4.2	Waste	The Licensee is authorized to receive mine water from Mt Thorley Mine, Bulga Mine, Hunter Valley Operations Mine and Redbank Power Station for storage and use in activities authorized by this licence.	2020 Annual Review 2021 Annual Review 2022 Annual Review (Draft)			Water transfers are reported in Annual Reviews: <ul style="list-style-type: none"> 2020 s6.7.2 – nil transfers to/from mines/Redbank 2021 s6.7.2 – nil transfers to/from mines/Redbank 2022 s6.7.2 – nil transfers to MTW. 190ML transferred to other mines (Bulga Mine) 	Noted	
L4.3	Waste	The Licensee must not store more than 100 tonnes (equivalent to 30 heavy Plant-tyres) of heavy plant waste tyres on the premises at any one time.		Environment and Community Manager - Waste tyres are not stored at WML premises. This occurs at MTO	No tyre storage was sighted on the Warkworth site.	Waste tyres are not stored at WML premises	Complies	
L5.1	Blasting	The air blast overpressure level from blasting operations in or on the premises must not exceed;115 dB (Lin Peak) at any time; at either monitoring point 4, 5,6,7 or 8 in Condition P1.4.	Blasting Records – 2020 Blasting Records – 2021 Blasting Records – 2022 Blasting Records – 2023			Air blast over pressure records demonstrated compliance with this requirement	Complies	
L5.2	Blasting	The air blast overpressure level from blasting operations in or on the premises must not exceed: 120 dB (Lin Peak) at any time; At either monitoring point 4, 5, 6, 7 or 8 in Condition P1.4.	Year to Date Blasting Records – 2020 Year to Date Blasting Records – 2021 Year to Date Blasting Records – 2022 Year to Date Blasting Records – 2023			The 2022 Annual Return reported that blast event n39-bfb-md1 & n39-bfb-ps1c produced an air blast overpressure of 125.5 dB received at the Warkworth monitoring station (EPA Point 4). The blast was investigated, and it was determined that the overpressure reading did not occur at a residential property, therefore the incident is not considered to be a non-compliance.	Complies	
L5.3	Blasting	The ground vibration peak particle velocity from blasting operations carried out in or on the premises must not exceed; 5mm/ second for more than 5% of the total number of blasts during each reporting period; At either monitoring point 4, 5, 6, 7 or 8 in Condition P1.4	Blasting Records – 2020 Blasting Records – 2021 Blasting Records – 2022 Blasting Records – 2023			All vibration results recorded were less than 5mm/s	Complies	
L5.4	Blasting	The ground vibration peak particle velocity from blasting operations carried out in or on the premises must not exceed: a) 10mm/ second at any time; b) At either monitoring point 5, 6, 7 or 8, in Condition P1.4	Blasting Records – 2020 Blasting Records – 2021 Blasting Records – 2022 Blasting Records – 2023			All vibration results recorded were less than 5mm/s	Complies	
L5.1	Blasting	Blasting in or on the premises must only be carried out between 0700 hours and 1800 hours, Monday to Saturday. Blasting on the premises must not take place on Sundays or Public Holidays without prior approval of the EPA.	Blasting Records – 2020 Blasting Records – 2021 Blasting Records – 2022 Blasting Records – 2023	Environment and Community Manager - no blasting was undertaken outside of approved hours during the audit period.		The records include the date and time of each blast.	Complies	
L5.6	Blasting	Offensive blast fume must not be emitted from the premises. <i>Offensive blast fume means post-blast gases from the detonation of explosives at the premises that by reason of their nature, duration, character or quality, or the time at which they are emitted, or any other circumstances;</i> 1. Are harmful to (or likely to be harmful) a person that is outside the premises from which it is emitted, or 2. Interferes unreasonably with (or is likely to interfere unreasonably with) the comfort or repose of a person who is outside the premises from which it is emitted.	Complaints Register Incident Register			Nine complaints were received during the audit period relating to blast impacts. Each complainant was investigated by MTW and no evidence of blast fume emissions from the site were identified.	Complies	

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Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
O1.1	Activities to be carried out in a competent manner	Licensed activities must be carried out in a competent manner. This includes: a) The processing, handling, movement and storage of materials and substances used to carry out the activity; and			Activities on site were observed to be undertaken in a competent manner effective management controls, supervision and management systems implemented to ensure compliance	Activities on site were observed to be undertaken in a competent manner effective management controls, supervision and management systems implemented to ensure compliance	Complies	
		b) The treatment, storage, processing, reprocessing, transport and disposal of waste generated by the activity.			All waste activities observed on site were appropriate to the scale and nature of the operations	All waste activities observed on site were appropriate to the scale and nature of the operations	Complies	
O2.1	Maintenance of Plant and Equipment	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	Plant and Equipment maintenance records.	Maintenance Manager demonstrated the operation of the mine Maintenance Management System. The system provides a framework for the management of routine maintenance and the identification and rectification of plant and equipment issues.	Designated equipment maintenance areas were inspected. Complex management systems and equipment are implemented to plan and record routine servicing and unplanned maintenance for items of plant, including coal trucks, drill rigs etc.	Designated equipment maintenance areas were inspected. Complex management systems and equipment are implemented to plan and record routine servicing and unplanned maintenance for items of plant, including coal trucks, drill rigs etc. The maintenance management system implemented at the mine are designed to ensure the efficient operation of plant and equipment were comprehensive	Complies	
		b) Must be operated in a proper and efficient manner.			Equipment observed during the site audit was observed to be operating in a proper and efficient manner. A Systems implemented to ensure the efficient operation of plant and equipment were comprehensive	Equipment observed during the site audit was observed to be operating in a proper and efficient manner.	Complies	
O2.2	Maintenance of Plant and Equipment	The sewage treatment system must be serviced by a suitably qualified and experienced wastewater technician at least once in each quarterly period and a minimum of four times per year.	Quarterly maintenance records			Quarterly maintenance records were sighted covering the audit period.	Complies	
O2.3	Maintenance of Plant and Equipment	The licensee must record each inspection and any actions required or recommended by the technician including all results of tests performed on the sewage treatment system by the technician as required in Condition O2.2.	Quarterly maintenance records			Quarterly sewage plant maintenance records were sighted and found to comply with this condition.	Complies	
O2.4	Maintenance of Plant and Equipment	The licensee must prepare a sewage treatment system maintenance program. The program must include; a) Provide written records of each quarterly inspection.	Quarterly maintenance records			Quarterly sewage plant maintenance records were sighted and found to comply with this condition.	Complies	
		b) Date, time and results of all routine maintenance procedures undertaken to the sewage treatment system; and	Quarterly maintenance records			Quarterly sewage plant maintenance records were sighted and found to comply with this condition.	Complies	
		c) Certification from a technician that the sewage system is operating at its capacity	Quarterly maintenance records			Quarterly sewage plant maintenance records were sighted and found to comply with this condition.	Complies	

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Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
O3.1	Dust	The premises must be maintained in a condition which minimizes or prevents the emission of dust from the premises.	Air Quality Management Plan, Mt Thorley Warkworth, Rev 4.1 dated 28 July 2022 Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023		During the site inspection, the Auditor observed water carts in operation. The auditor noted that minor dust was being generated within the operating open cut and on haul roads, and in areas that were being stripped in preparation for mining, although not evidence that visual dust was leaving the site at the time of the site inspection. Significant areas of the site have been cleared and progressive rehabilitation works are behind schedule. The Auditor also observed significant areas, that while not ready for final rehabilitation, would benefit from temporary stabilisation to help reduce dust emissions during adverse wind conditions.	Fifty-eight dust-related complaints were received during the audit period. Significant areas of the site have been cleared and progressive rehabilitation works are behind schedule. The Auditor also observed areas, that while not ready for final rehabilitation, would benefit from temporary stabilisation to help reduce dust emissions during adverse wind conditions. While no exceedances in dust criteria were reported during the audit period, the number of dust related complaints and the Auditor's observations relating to rehabilitation and stabilisation indicate that nuisance dust emissions are being generated by the mine.	Non-compliant	Increase the rate of progressive rehabilitation works with the objective of meeting the established progressive rehabilitation targets. Prepare and implement a program for the stabilisation of unsealed / disturbed areas of the site including stockpiles, finished landforms, and disturbed areas that are not currently being actively worked / filled). The program should identify and classify all areas of the site that are currently disturbed according to the dust generation potential of those areas and establish clear targets for the stabilisation of those areas (either permanent or temporary) with the objective of meeting the requirements of the Blue Book.
O3.2	Dust	All trafficable areas, coal storage and vehicle manoeuvring areas in or on the premises must be maintained, at all times, in a condition that will minimise the generation, or emission from the premises, of wind-blown or traffic generated dust.			Trafficable areas are well delineated. Water carts were in operation at the time of the IEA site inspection.	As observed during the audit inspection. Guideposts have been installed to define trafficable areas and restrict vehicle movements to those areas. Water carts were in operation.	Complies	
O3.3	Dust	All operations and activities occurring at the premises must be carried out in a manner that will minimise the emission of dust from the premises.	Air Quality Management Plan, Mt Thorley Warkworth, Rev 4.1 dated 28 July 2022		The operations observed during the site audit were being managed appropriately to minimise dust generation.	As observed during the audit inspection all operational areas of the site were managed appropriately to minimise the generation of dust. Water carts are deployed to wet down internal roads and minimise dust generation. It was noted (see Condition O3.1 above) however that the site contains significant areas that have been disturbed and would be sources of windblown dust.	Complies	
O4.1	Effluent application to land	Application of wastewaters must only be applied at a rate that can be assimilated by the effluent discharge utilisation area and its evapotranspiration capacity.			No evidence of effluent ponding or uncontrolled discharges were observed.	No evidence of effluent ponding or uncontrolled discharges were observed.	Complies	
O4.2	Effluent application to land	The license must ensure that the effluent discharge utilisation area perimeter is fenced and signposted "Effluent Re-Use Area Keep Out" and controlled in a manner to ensure exclusion of persons from that area.			The effluent irrigation area is fenced and signposted (Photograph 8).	The effluent irrigation area is fenced and signposted (Photograph 8).	Complies	

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Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
O5.1	Emergency Response	The licensee must maintain, and implement as necessary, a current Pollution Incident Response Management Plan (PIRMP) for the premises. The licensee must always keep the incident response plan on the premises. The incident response plan must document systems and procedures to deal with all types of incidents (e.g. spills, explosions or 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. The licensee must develop a Pollution Incident Response Management Plan in accordance with the requirements in Part 5.7A of the Protection of the Environment Operations (POEO) Act 1997 and POEO regulations.	Pollution Incident Response Management Plan – Mount Thorley Warkworth, revision 10 dated 1 October 2019. EPA Website – Summary Licence 1376			The PIRMP is placed on the MTW website and includes the following information: <ul style="list-style-type: none"> Regulatory requirements and duty to notify Environmental hazards and pollution inventory Key contact details Notification procedure (internal and external) Emergency Contact details Training, testing, reviewing and communicating the plan The EPA website notes the latest test of the PIRMP was undertaken on the 4 th of November 2022. The next testing for the PIRMP is scheduled for 4 November 2023.	Complies	
O6.1	Heavy Plant-Tyre Disposal	The Licensee is authorised to dispose of heavy Plant-tyre waste generated on the premises, in the pit. The Licensee must: a) ensure that heavy Plant waste tyres are re-used on the premises as much as practical;			Used heavy vehicle tyres are used on site to demarcate haul routes and on-site roads.	Heavy plant tyres are reused on-site where appropriate.	Complies	
		b) ensure that any surplus heavy Plant waste tyres can be emplaced by being spread out on the pit-floor and buried as deep as practical, but, covered by at least 20m of inert material beneath any final rehabilitated surface;		Environment and Community Manager - Waste tyres are buried within the mine pit (cannot leach into watercourse). Heavy Plant Disposal, which includes the Non-mineral waste management procedure, Scrap Tyre process flowchart, and Tyre and Rim Management Plan.	No evidence of inappropriate disposal was observed by the Auditor.	MTW has developed and issued procedures for waste tyre management. No evidence of inappropriate disposal was observed by the Auditor.	Complies	
		c) place the tyres at least 10m away from coarse reject material or tailings emplacement areas;					Complies	
		d) not place any tyres near heated material; and					Complies	
		e) not place any tyres in an area likely to leach to any watercourse					Complies	
O7.1	Other Operating Conditions	All above ground tanks containing material that is likely to cause environmental harm must be bunded or have an alternative spill containment system in place.			Above ground tanks used for fuels and oils were observed to have appropriate bunding and spill control systems in place (Photograph 9).	Above ground tanks used for fuel and other liquids were observed to have appropriate bunding and spill control systems in place.	Complies	
M1.1	Monitoring Records	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.					Noted	
M1.2	Monitoring Records	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;	Monthly Environmental Monitoring Reports (MTW Website)			All records reviewed during the audit were in a legible form.	Complies	
		b) Kept for at least 4 years after the monitoring or event to which they relate took place; and	Monthly Environmental Monitoring Reports (MTW Website)			Monitoring records from 2017 were sighted on the MTW website.	Complies	
		c) Produced in a legible form to any authorized officer of the EPA who asks to see them					Noted	

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Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations	
M1.3	Monitoring Results	The following records must be kept in respect of any samples required to be collected for the purposes of this licence; a) The date(s) on which the sample was taken;	MTW surface water sampling and testing records			Surface water and effluent sampling and testing records were sighted including monthly consultant reports from AECOM. The records include description of the approved AS methods, COC, and lab results. This includes this information required by M1.3 being sample dates, times, point and sampler's name.	Complies		
		b) the time(s) at which the sample was collected;					Complies		
		c) The point at which the sample was taken; and					Complies		
		d) The name of the person who collected the sample					Complies		
M2.1	Requirement to monitor concentration of pollutants discharged	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.	Annual Return (AR) Non-Compliance Detail Licence Number 1376, 01 Dec 2021 – 30 November 2022 (EPA Website) Annual Return Non-Compliance Detail Licence Number 1376, 01 Dec 2020 – 30 November 2021 (EPA Website)			The required sampling and testing is being undertaken.	Complies		
M2.2	Requirement to monitor concentration of pollutants discharged	Air Monitoring Requirements:	Annual Return Non-Compliance Detail Licence Number 1376, 01 Dec 2019 – 30 November 2020 (EPA Website)			As reported in the 2020, 2021 and 2022 Annual Returns, EPL 1376 requires continuous monitoring for EPA air monitoring Points 9, 10, 11 and 12. Monitoring data capture was >93%, but not continuous during the reporting period (4 occurrences)	Non-compliant	Ensure that all continuous monitoring equipment is operational and well maintained.	
	Table M2.2	Point 9,10,11,12							
		Pollutant	Units of Measure	Frequency	Sampling method				
		PM10	Micrograms per cubic metre	continuous	Special Method 1				
M 2.3	Requirement to monitor concentration of pollutants discharged	Water and/or Land Monitoring Requirements	Annual Return (AR) Non-Compliance Detail Licence Number 1376, 01 Dec 2021 – 30 November 2022 (EPA Website) Annual Return Non-Compliance Detail Licence Number 1376, 01 Dec 2020 – 30 November 2021 (EPA Website) Annual Return Non-Compliance Detail Licence Number 1376, 01 Dec 2019 – 30 November 2020 (EPA Website)			As reported in the 2001 and 2022 Annual Returns, EPL water monitoring Points 26, 27, 28 and 30 were unable to be sampled due to sample area either unsafe to access due to rain events resulting in flooding, or being dry at time of sampling (6 occurrences)	Non-compliant	Access to the sampling sites was not possible due to adverse weather conditions. No further actions are recommended.	
	Table M2.3	Point 1							
			Pollutant	Units of Measure	Frequency				Sampling method
			Conductivity	micro siemens per centimetre	Continuous during discharge				A probe designed to measure the range 0 to 10,000 uS/cm
			pH	pH	Daily during any discharge				Grab sample
			Total Suspended Solids	milligrams per litre	Daily during any discharge				Grab sample
		Point 14,15,16,17,18							
			Faecal Coliforms	colony forming units per 100 millilitres	Quarterly				Grab sample
			pH	pH	Quarterly				Grab sample
		Point 25							
			Turbidity	nephelometric turbidity units	Continuous during discharge				Probe
		Point 26,27,28,29,30,31,32,33							
			Electrical Conductivity	micro siemens per centimetre	Quarterly				Grab sample
			pH	pH	Quarterly				Grab sample
	Total Suspended Solids	milligrams per litre	Quarterly	Grab sample					

Environment Protection Licence (EPL 1376) Warkworth Mining Ltd								
Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
M 3.1	Testing Methods – Concentration Limits	Monitoring for the concentration of a pollutant emitted to the air required to be conducted by this licence must be done in accordance with: <ul style="list-style-type: none"> 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. 	Air Emission Testing Records covering the audit period.	Environment and Community Manager - Monitoring is done in accordance with Special Method 1 - manufacturers operating manual for the Dustraks. The manufacturers operating manual, evidence of an annual calibration certificate, maintenance register are maintained by MTW.		Air quality monitoring is undertaken by approved methods.	Complies	
M3.2	Testing Methods – Concentration Limits	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 unless another method has been approved by the EPA in writing before any tests are conducted.	Water Testing Records covering the audit period.			Water testing is undertaken by approved methods.	Complies	
M3.3	Testing Methods – Concentration Limits	Sampling, storage and analysis of electrical conductivity by grab sample is permitted to be undertaken in accordance with AECOM Australia Method; Conductivity by classical using APHA 2510 B (EPA approval DOC18/17513-08).					Noted	
M3.4	Testing Methods – Concentration Limits	Sampling, storage and analysis of pH by grab sample is permitted to be undertaken in accordance with AECOM Australia Method; pH by classical using APHA 4500 H+B (EPA Approval DOC18/17513-08).					Noted	
M4.1	Weather Monitoring	At the point(s) identified below, the licensee must monitor (by sampling and obtaining results by analysis) the parameters specified in Column 1 of the table below, using the corresponding sampling method, units of measure, averaging period and sampling frequency, specified opposite in the Columns 2, 3, 4 and 5.				As reported in the 2021 and 2022 Annual Returns, EPL 1376 requires continuous monitoring for Charlton Ridge Meteorological Station. Monitoring data capture was >99%, but not continuous during the reporting period.	Non-compliant	Ensure that all continuous monitoring equipment is operational and well maintained.
		Parameter	Sampling Method	Units of Measure	Averaging Period	Frequency		
		Rainfall	AM-4	Millimetres	10 minutes	Continuous		
		Temperature at 2 metres	AM-2 &AM4	Degrees Celsius	10 minutes	Continuous		
		Wind Speed at 10 Metres	AM-2 &AM4	Metres per second	10 minutes	Continuous		
		Wind Direction at 10 Metres	AM-2 &AM4	Degrees	10 minutes	Continuous		
Sigma Theta	Special Method 2	Degrees	10 minutes	Continuous				
M5.1	Recording of Pollution Complaints	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			The complaints register provided to the Auditor was legible.	Complies	
M5.2	Recording of Pollution Complaints	The record must include details of the following:	Complaints Register			The date and time of complaints are recorded on the MTW complaints register	Complies	
		a) The date and time of the complaint;	Complaints Register			The Complaints Register includes the details of how the complaint was made.	Complies	
		b) The method by which the complaint was made;	Complaints Register			The name of the complainant is recorded on the MTW complaints register	Complies	
		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	Complaints Register			The name of the complainant is recorded on the MTW complaints register	Complies	
		d) The nature of the complaint;	Complaints Register			The complaints register includes the details of the immediate actions taken	Complies	
e) The action taken by the licensee in relation to the complaint, including any follow-up contact with the complainant; and	Complaints Register							

Environment Protection Licence (EPL 1376) Warkworth Mining Ltd											
Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations			
M5.2	Recording of Pollution Complaints	f) If no action was taken by the licensee, the reasons why no action was taken.	Complaints Register			The Complaints Register includes, when appropriate, details of why no action was taken.	Complies				
M5.3	Recording of Pollution Complaints	The record of a complaint must be kept for at least 4 years after the complaint was made.	Complaints Register Website Complaints Summary			Details of complaints are kept for at least 4 years.	Complies				
M5.4	Recording of Pollution Complaints	The record must be produced to any authorised officer of the EPA who asks to see them.					Noted				
M6.1	Telephone complaints line	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.				The MTW website provides the details of a community complaints hotline which is available 24 hours a day.	Complies				
M6.2	Telephone complaints line	The licensee must notify the public of the complaints like telephone number and the fact that it is a complaints line so that the impacted community knows how to make a complaint.				The website clearly notes that the contact telephone number is a complaints line so there is no confusion.	Complies				
M6.3	Telephone complaints line	The preceding two conditions do not apply until 3 months after; the date of the issue of this licence.					Noted				
M7.1	Requirement to monitor volume or mass	For each discharge point or utilisation area specified below, the licensee must monitor; The volume of liquids discharged to water or applied to the area;	Annual Return – Warkworth Mining Ltd, Licence 1376 dated 27 January 2021 Annual Return – Warkworth Mining Ltd, Licence 1376 dated 27 January 2022 Annual Return – Warkworth Mining Ltd, Licence 1376 dated 23 January 2023			As noted in Section B2 (of each Annual Return), no HRTS discharge was undertaken during the reporting period	Complies				
		a) The mass of solids applied to the area.								The required monitoring data is provided in the Annual Reviews.	Complies
		b) The mass of pollutants emitted to the air;								The required monitoring data is provided in the Annual Reviews.	Complies
		c) At the frequency and using the method and units of measure, specified below.				The required monitoring data is provided in the Annual Reviews.	Complies				
M7.1	Table M7.1	Point 1									
		Frequency	Unit of Measure	Sampling Method							
		Continuous during discharge	megalitres per day	Ultrasonic flow meter							
M8.1	Blasting	To determine compliance with conditions L4.2, L4.3, L4.4 and L4.5; a) air blast overpressure and ground vibration levels must be measured and electronically recorded for monitoring points 5, 6, 7, 8, and 9 for the parameters specified in Column 1 of the table below; and	Blasting Records – 2020 Blasting Records – 2021 Blasting Records – 2022 Blasting Records – 2023			Blasting parameters measured and recorded include Vibration (mm/s) and Air blast Overpressure (dBL)	Complies				
		b) The licensee must use the units of measure, sampling method, and sample at the frequency specified opposite in the other columns.	Blasting Records – 2020 Blasting Records – 2021 Blasting Records – 2022 Blasting Records – 2023			Blasting parameters measured and recorded include Vibration (mm/s) and Air blast Overpressure (dBL)	Complies				
	Table M8.1	Parameter	Units of Measure	Frequency	Sampling Method						
		Airblast Overpressure	Decibels (Linear Peak)	All Blasts	Australian Standard AS 2187.2-2006						
		Ground Vibration Peak Particle Velocity	millimetres/second	All Blasts	Australian Standard AS 2187.2-2006						

Environment Protection Licence (EPL 1376) Warkworth Mining Ltd									
Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations	
M9.1	HRSTS Monitoring	HRSTS Monitoring – The licensee must continuously operate and maintain communication equipment which makes the conductivity and flow measurements, taken at Point 4 available to the “Service Coordinator” within one hour of those measurements being taken and makes them available in the format specified in the “Hunter River Salinity Trading Scheme Discharge Point Telemetry Specification – Rev V1.0 released 4 October 2018” as published by Water NSW.		Environment and Community Manager - Maintenance of the system is subject to a maintenance contract with Benchmark Monitoring. The WML system has not been used in the audit period, however it continues to be maintained with sensors and comms to the Water NSW telemetry system.			The WML system has not been used in the audit period, however it continues to be maintained	Complies	
M9.2	HRSTS Monitoring	The licensee must ensure that all monitoring data is within a margin of error of 5% for conductivity measurements and 10% for discharge flow measurement.	https://hydrotel.waternsw.com.au/hrsts.html				Monitoring data is provided to Water NSW and is available via their website.	Complies	
M9.3	HRSTS Monitoring	The licence must mark monitoring point(s) 4, with a sign which clearly indicates the name of the licensee, whether the monitoring point is up or down stream of the discharge point(s) and that it is a monitoring point for the Hunter River Salinity Trading Scheme.		Environment and Community Manager - WML discharge point has not been in operation during the audit period, and not since 2015 prior to the audit and the sign is no longer present. A new sign was actually ordered and received during the audit period and will be installed after the audit period.			The required signage was not installed at the time of this IEA.	Non-compliant	Ensure that signage for Monitoring Point 4 is installed.
M9.4	Requirement to Monitor Particulate Matter	The Licensee must record the average PM10 concentration at Monitoring Points 9, 10, 11 and 12 at intervals of 10 minutes. This data must be made available upon request by any Authorised Officer of the EPA who asks to see them.					Section B2 of each Annual Return provides records of PM10 concentrations recorded for points 9 10, 11 and 12	Complies	
R1.1	Reporting Condition	The licensee must complete and supply to the EPA an Annual Return in the approved form comprising;	Annual Return – Warkworth Mining Ltd, Licence 1376 dated 27 January 2021 Annual Return – Warkworth Mining Ltd, Licence 1376 dated 27 January 2022 Annual Return – Warkworth Mining Ltd, Licence 1376 dated 23 January 2023				Section A of each Annual Return includes a Statement of Compliance	Complies	
		1. A Statement of Compliance					Section B of each Annual Return includes a monitoring and complaints summary	Complies	
		2. A Monitoring and Complaints Summary					Section C of each Annual Return includes a statement of compliance with License conditions	Complies	
		3. A Statement of Compliance – Licence Conditions					Section D of each Annual Return includes a statement of compliance – Load based fee calculation	Complies	
		4. A Statement of Compliance – Load based Fee					Section E of each Annual Return includes a statement of compliance Requirement to prepare a PIRMP	Complies	
		5. A Statement of Compliance – Requirement to Prepare Pollution Incident Response Management Plan					Section F of each Annual Return includes a statement of compliance – Requirement to Publish Pollution Monitoring Data and	Complies	
		6. A Statement of Compliance – Requirement to Publish Pollution Monitoring Data and					Section G of each Annual Return includes a statement of compliance – Requirement to Publish Pollution Monitoring data	Complies	
		7. A Statement of Compliance - Environmental Management Systems and Practices							
		At the end of each reporting period, the EPA will provide to the licensee notification that the Annual Return is due.					Noted		

Environment Protection Licence (EPL 1376) Warkworth Mining Ltd								
Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
R1.2	Reporting Condition	The Annual Return must be prepared in respect of each reporting period, except as provided below. Note: The term "reporting period" is defined in the dictionary at the end of this licence. Do not complete the Annual Return until after the end of the reporting period.	Annual Return – Warkworth Mining Ltd, Licence 1376 dated 27 January 2021 Annual Return – Warkworth Mining Ltd, Licence 1376 dated 27 January 2022 Annual Return – Warkworth Mining Ltd, Licence 1376 dated 23 January 2023			Annual Returns were prepared and submitted for each reporting period during this audit period.	Complies	
R1.3	Reporting Condition	Where this licence is transferred from the licensee to a new licensee; a) The transferring licensee must prepare an Annual Return for the period commencing on the first day of the reporting period and ending on the date the application for the transfer of the licence to the new licensee is granted; and				EPL not transferred during the audit period	Noted	
R1.3	Reporting Condition	b) The new licensee must prepare an Annual Return for the period commencing on the date the applicant for the transfer of the licence is granted and ending on the last day of the reporting period.				EPL not transferred during the audit period	Noted	
R1.4	Reporting Condition	Where this licence is surrendered by the licensee or revoked by the EPA or Minister, the licensee must prepare an Annual Return in respect of the period commencing on the first day of the reporting period and ending on; a) In relation to the surrender of a licence – the date when notice in writing of approval of the surrender is given; or				The EPL won't be surrendered until after the operations are ceased	Noted	
		b) In relation to the revocation of the licence – the date from which notice revoking the licence operates.					Noted	
R1.5	Reporting Condition	The Annual Return for the reporting period must be supplied to the EPA via eConnect EPA or by registered post no 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).	EPA Public Register			The end date for each annual Return is 30 November 2020, 2021, and 2022 respectively. Submission dates for each annual return were as follows: <ul style="list-style-type: none"> 2022 – 24 January 2023 2021 – 27 January 2022 2020 – 27 January 2021 All annual Returns for the reporting period were therefore submitted within the timeframes as required by this condition	Complies	
R1.6	Reporting Condition	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.					Noted	
R1.7	Reporting Condition	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	Annual Return – Warkworth Mining Ltd, Licence 1376 dated 27 January 2021 Annual Return – Warkworth Mining Ltd, Licence 1376 dated 27 January 2022			Each Annual Return was signed by Directors	Complies	
		b) By a person approved in writing by the EPA to sign on behalf of the licence holder	Annual Return – Warkworth Mining Ltd, Licence 1376 dated 23 January 2023			Each Annual Return was signed by Directors	Complies	

Environment Protection Licence (EPL 1376) Warkworth Mining Ltd

Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
R2.1	Notification of Environmental Harm	Notifications must be made by telephoning the Environmental Line service on 131 555.	Incident Register EPA Correspondence verifying receipt of incident reports.			There are several examples where incidents have occurred with the potential to cause environmental harm to have been notified the EPA. These include (but are not limited to): <ul style="list-style-type: none"> Water release from dam 9s Spillway (14 May 2020) Water from equipment park area (4 January 2021) The auditee has maintained records of notifications to the EPA as well as activation of the PIRMP	Complies	
R2.2	Notification of Environmental Harm	The licensee must provide written details of the notification to the EPA within 7 days of the date on which they became aware of the incident.	Incident Register EPA Correspondence verifying receipt of incident reports.			A total of 11 incidents have been notified to the EPA during the reporting period. This includes 7 relating to Water Discharge, 1 Blasting and 3 Noise.	Complies	
R2.2	Notification of Environmental Harm	Note: The licensee or its employees must notify all relevant authorities of incidents causing or threatening material harm to the environment immediately after the person becomes aware of the incident in accordance with the requirements of Part 5.7 of the Act.	Incident Register EPA Correspondence verifying receipt of incident reports.			There are several instances where overtopping of sediment basins has resulted in the activation of the pollution incident response and the notification of relevant authorities.	Complies	
R3.1	Written Report	Where an authorised officer of the EPA suspects on reasonable grounds that; <ul style="list-style-type: none"> a) Where this licence applies to premises, an event has occurred at the premises, the authorised officer may request a written report of the event.; or 					Noted	
		<ul style="list-style-type: none"> b) Where this licence applies to vehicles or mobile to the environment (whether the harm occurs on or off the premises to which the licence applies), the authorised officer may request a written report of the event. 					Noted	
R3.2	Written Report	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.	Incident Register EPA Correspondence verifying receipt of incident reports.			Reports have been submitted to EPA in accordance with agreed timeframes. In some instances, extensions to timeframes have been sought and agreed with EPA	Complies	
R3.3	Written Report	The request may require a report which includes any or all of the following information; <ul style="list-style-type: none"> a) The cause, time and duration of the event 	Letter from Yancoal (G.Mulhearn) to EPA S James titled "REF-NO/EPA130626 Sediment Dam overtopping Event (Dam 53N) Warkworth Mining Limited (WML) dated 14 October 2022			There have been several incidents reported to EPA where a report has been submitted following the event. The reports have been prepared in response to EPA requests,	Complies	
		<ul style="list-style-type: none"> b) The type, volume and concentration of every pollutant discharged as a result of the event; 					Noted	
		<ul style="list-style-type: none"> 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; 					Noted	
		<ul style="list-style-type: none"> d) The name, address and business hours telephone number of every other person (of whom the licence is aware) who witnessed the event, unless the licensee has been unable to obtain the information after making reasonable effort 					Noted	
		<ul style="list-style-type: none"> e) Action taken by the licensee in relation to the event, including any follow up contact with any complaints; 					Noted	

Environment Protection Licence (EPL 1376) Warkworth Mining Ltd								
Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
R3.3	Written Report	f) Details of any measure taken or proposed to be taken to prevent or mitigate against a recurrence of such an event; and					Noted	
		g) Any other relevant matters.					Noted	
R3.4	Written Report	The EPA may make a written report 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.					Noted	
R 4.1	Notification of Pollution of Waters	The Licensee must notify the EPA by telephoning the Environment Line service on 131555 immediately after the Licensee becomes aware of any contravention or potential contravention of Condition L1 of the Licence	Incident Register EPA Correspondence verifying receipt of incident reports.			There have been several events that have resulted in the release of water from the site and the activation of the PIRMP. Evidence was provided that demonstrates the EPA were notified immediately when the Licensee became aware of any event.	Complies	
R 4.2	Notification of Pollution of Waters	The Licensee must provide written details of the notification to the EPA Director Hunter at hunter.region@epa.nsw.gov.au within 7 days of the date of the notification.	Incident Register EPA Correspondence verifying receipt of incident reports.			A total of 11 incidents have been notified to the EPA during the reporting period. This includes 7 relating to Water Discharge, 1 Blasting and 3 Noise.	Complies	
R 5.1	HRSTS Reporting	The licensee must compile a written report of the activities under the Scheme for each scheme year. The scheme year shall run from 1 July to 30 June each year. The written report must be submitted to the EPA's regional office within 60 days after the end of each scheme year and be in a form and manner approved by the EPA. The information will be used by the EPA to compile an annual scheme report.		Environment and Community Manager - No discharges during the audit period for WML.		No discharges during the audit period for WML. Annual HRSTS reports were issued to the EPA for each year during the audit period.	Complies	
R 5.2	HRSTS Reporting	The Licensee must include graphical analysis of turbidity measured at EPA Point 25 for the length of any discharges from EPA Point 1 within the HRSTS Report that includes the two-hour period prior to the commencement of any discharge from EPA Point 1 and the two-hour period after any discharge from EPA Point 1.				No discharges during the audit period for WML. Annual HRSTS reports were issued to the EPA for each year during the audit period.	Complies	
R 5.3	Blast Exceedance Reporting	The licensee must report any exceedance of the licence blasting limits to the regional office of the EPA as soon as practicable after the exceedance becomes known to the licensee or to one of the licensee's employees or agents.					Noted	
R 5.4	Blast Monitoring Report	The results of the blast monitoring required by condition M8.1 must be submitted to the EPA at the end of each reporting period.	Blasting Records – 2020 Blasting Records – 2021 Blasting Records – 2022 Blasting Records – 2023	Environment and Community Manager - The annual blast reports are submitted with the maintenance program		The annual blast reports are submitted with the maintenance program	Complies	
R 5.5	Sewage Treatment Plant Maintenance	The sewage treatment system maintenance program required by Condition O2.4 must be submitted annually to the EPA with the Annual Return.	Letter from MTW (G Mulhearn) to the EPA titled "Warkworth Mining Limited Environment Protection Licence (EPL 1376) – Sewage Treatment Plant Maintenance Program Records", dated 3 January 2021, 15 January 2022 and 23 January 2023	Environment and Community Manager - The STP maintenance reports are submitted with the maintenance program		The STP Maintenance reports are submitted with the maintenance program	Complies	
R 5.6	Sewage Treatment Plant Maintenance	The licensee must retain a copy of each report required by Condition O2.3 for 3 years from the date each record is made.	STP Maintenance Records.			STP maintenance records were sighted by the Auditor.	Complies	

Environment Protection Licence (EPL 1376) Warkworth Mining Ltd								
Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
R 5.7	Heavy Plant Tyre Disposal Report	The licensee must provide the EPA with the Annual Return a Heavy Plant-Tyre Disposal Report. The Report must include: a) plan of the disposed heavy plant waste tyres on the premises for the period that includes: (i) each tyre serial number; (ii) supplier of each tyre; (iii) purchase date of each tyre; (iv) disposal date of each tyre; (v) co-ordinates (easting and northings) of the disposal of each tyre; (vi) the Real Level (RL) in metres AHD of each tyre placed in the pit; (vii) the number of tyres buried in a particular area; and (viii) the cumulative tonnage of tyres disposed of at the premises each year.		Environment and Community Manager – No tyres were disposed of at Warkworth during the audit period.	No evidence of tyre disposal was observed at the Warkworth mine during this IEA.	No tyres were disposed of at Warkworth during the audit period.	Not Triggered	
R 5.8	Water Quality Report	The licensee must provide the EPA with its Annual Return an annual water quality monitoring report prepared by an appropriately qualified and experienced person that includes the following:	Letter from MTW (G Mulhearn) to the EPA titled "Warkworth Mining Limited Environment Protection Licence (EPL 1376) – Annual Return – Annual Ambient Water Quality Monitoring Report", dated 22 January 2021, 17 January 2022 and 23 January 2023. EPA Public Register			The annual water quality monitoring reports were provided to the EPA with the yearly annual returns and contained the information required by Condition R5.8.	Complies	
		a) for the monitoring required by the licence during the reporting period to which the Annual Return relates:					Complies	
		(i) a summary of results for all ambient water quality monitoring required by the licence in table form and graphical form;					Complies	
		(ii) total daily rainfall records from the premises meteorological monitoring required by the licence on the day that the sampling was undertaken in table form;					Complies	
		(iii) total daily continuous rainfall records in graphical form; and					Complies	
		(iv) a plan with the monitoring locations.					Complies	
		(v) A graphical presentation of the trends of monitoring results required by the licence for the reporting period to which the Annual Return relates and the preceding data for the period of record the licensee has monitoring results for the licensed location.					Complies	
		(vi) A graphical representation of total daily continuous rainfall records required by the licence for the record that matches the ambient water quality results, if available.				Complies		
G1.1	Copy of Licence to be kept at the premises	A copy of this licence must be kept at the premises to which the licence applies.	MTW website.			The EPL is available via the MTW website.	Complies	
G1.2	Copy of Licence to be kept at the premises	The licence must be produced to any authorised officer of the EPA who asks to see it.					Noted	
G1.3	Copy of Licence to be kept at the premises	The licence must be available for inspection by any employee or agent of the licensee working at the premises.					Noted	

Environment Protection Licence (EPL 1376) Warkworth Mining Ltd								
Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
G2.1	Completed Programs	Program	Description		Completed Date		Noted	
	Table G2.1	PRP 1 - Salinity Levels	During the next HRSTS discharge the licensee must monitor salinity levels at the nearest downstream irrigation off-take point, to coincide with the peak flow of discharge water. A report must be submitted to the RM within 30 days after sampling.		15-August-2008			
		Coal Mine Particulate Matter Control Best Practice	Requires licensee to conduct a site-specific Best Management Practice (BMP) determination to identify ways to reduce particle emissions		30-July-2012			
		Premises Noise Limits	The licensee is to determine noise limits for the premises in accordance with the INP or otherwise as consistent with the project approval and develop a compliance monitoring program to assess compliance with those limits		08-November-2018			
		Particulate Matter Control Best Practice Implementation – Wheel Generated Dust	Implementation of particulate matter best management practices to address wheel-generated dust.		15-August-2014			
		Particulate Matter Control Best Practice Implementation – Disturbing and Handling Overburden under Adverse Weather Conditions	Implementation of particulate matter best management practices to address the handling of overburden during adverse weather.		15-August-2014			
		Particulate Matter Control Best Practice Implementation - Trial of Best Practice Measures for Disturbing and Handling Overburden	Investigation to establish best practice measures for the handling of overburden.		31-March-2015			
		Coal Mine Wind Erosion of Exposed Land Assessment	Assessment of predicted vs actual exposed lands		31-March-2015			
E1.1	Hunter Salinity Trading Scheme (HRSTS)	This licence authorises the discharge of saline water into the Hunter River Catchment from an authorised discharge point (or points), in accordance with the <i>Protection of the Environment Operations (Hunter River Salinity Trading Scheme) Regulation 2002</i> .				As reported in Section B3, of each Annual Return, no HRTS discharge was undertaken during the audit period	Not Triggered	
E1.2	Hunter Salinity Trading Scheme (HRSTS)	For the purposes of Clauses 23 and 29 of the Protection of the Environment Operations (Hunter River Salinity Trading Scheme) Regulation 2002 the licensee must apply the conversion factor of 0.6.				As reported in Section B3, of each Annual Return, no HRTS discharge was undertaken during the audit period	Not Triggered	
E1.3	Hunter Salinity Trading Scheme (HRSTS)	The licensee must not exceed the hourly volume discharge limit calculated using the following formula, at all discharge point(s) on this licence titled "Discharge of saline water under the Hunter River Salinity Trading Scheme (HRSTS)". H = V / RRT Where: H Is the hourly volume discharge limit (in megalitres per hour); V Is the licence holders volume discharge limit for the block (in megalitres) calculated in accordance with clauses 23 of the Protection of the Environment Operations (Hunter River Salinity Trading Scheme) Regulation (2002); and RRT Is the difference between the discharge stop and start times shown on the river register for that block (in hours).				As reported in Section B3, of each Annual Return, no HRTS discharge was undertaken during the audit period	Not Triggered	

Compliance Register EPL 1976

Mt Thorley Operations

Appendix A4

Environment Protection Licence (EPL 1976) Mt Thorley								
Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
A1.1	What the Licence Authorises and Regulates	This licence authorises the carrying out of scheduled activities listed below at the premises specified in A2. The activities are listed according to their scheduled activity classification, fee-based activity classification and the scale of the operation. Unless otherwise further restricted by condition of this licence, the scale at which the activity is carried out must not exceed the maximum scale specified in this condition.	Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023			Table 4.1 of each Annual Review documents the following tonnages of ROM coal extracted: <ul style="list-style-type: none"> • 2020 – 0.88 • 2021 – 0.43 • 2022 – 0.13 The recorded tonnages are less than the maximum tonnage prescribed by this condition, therefore compliant.	Complies	
	Table A1.1	Scheduled Activity	Fee Based Activity	Scale				
		Coal Works	Coal Works	>5000000T annual handling				
		Mining for Coal	Mining for Coal	>2000000-3500000 T annual Production				
		What the Licence Authorises and Regulates	Note: In relation to this licence, the licensee must comply with: <ul style="list-style-type: none"> a) The activity scale limits imposed by the licence; 	Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023			Table 4.1 of each Annual Review documents the following tonnages of ROM coal extracted: <ul style="list-style-type: none"> • 2020 – 0.88 • 2021 – 0.43 • 2022 – 0.13 The recorded tonnages are less than the maximum tonnage prescribed by this condition, therefore compliant.	Complies
	What the Licence Authorises and Regulates	b) The activity scale limits which apply for the reporting period specified in this licence; and	Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023			Table 4.1 of each Annual Review documents the following tonnages of ROM coal extracted: <ul style="list-style-type: none"> • 2020 – 0.88 • 2021 – 0.43 • 2022 – 0.13 The recorded tonnages are less than the maximum tonnage prescribed by this condition, therefore compliant.	Complies	
		c) The activity scale limits imposed by other legal instruments, such as approvals currently in force under the <i>Environmental Planning and Assessment Act 1979</i> .				Refer to audit schedules for SSD 6465	Complies	
A 2.1	Premises or Plant to Which this Licence Applies	The Licence Applies to the following Premises					Noted	
A2.1	Table A2.1	Premises Details Mt Thorley Operations, Mt Thorley Road, Mt Thorley NSW 2330 Premises defined by plan titled "MTO EPL 1976" dated 29 May 2018 Showing premises boundary EPA ref doc18/346356. The plan is figure 1 of 3 submitted to the EPA on 29 may 2018.						
A 3.1	Other Activities	This licence applies to all other activities carried on at the premises, including					Noted	
A 3.1	Table A3.1	Ancillary Activity Sewage Treatment Systems						

Environment Protection Licence (EPL 1976) Mt Thorley								
Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
A 4.1	Information Supplied to the EPA	Works and activities must be carried out in accordance with the proposal contained in the licence application, except as expressly provided by a condition of this licence. In this condition the reference to "the licence application" includes a reference to: a) The applications for any licence (including former pollution control approvals) which this licence replaces under the <i>Protection of the Environment Operations (Savings and Transitional) Regulation 1998</i> ; and b) The licence information form provided by the licensee to the EPA to assist the EPA in connection with the issuing of this licence.					Noted	
P.1.1	Location of Monitoring /Discharge Points and Areas	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.					Noted	
	Table P1.1	EPA identification no.	Type of Monitoring Point	Location Description				
		10	Particulate Matter Monitoring	Monitor "Dragline Crossing" at coordinates 318679 6388113 (Easting Northing) identified as EPA 10 on Figure 2.				
		11	Particulate Matter Monitoring	Monitor "Heavy Vehicle Bridge" at coordinates 320800 6387890 (Easting Northing) identified as EPA 11 on Figure 2				
		13	Particulate Matter Monitoring	Monitor "MTO Boundary" at coordinates 320781 6384921 (Easting Northing) identified as EPA 13 on Figure 2.				
		19	Particulate Matter Monitoring	Monitor "MTIE" at co-ordinates 321656, 6388797 (Easting, Northing) identified as EPA 12 on Figure 2.				
P1.2	Location of Monitoring /Discharge Points and Areas	The following utilisation areas referred to in the table below are identified in this licence for the purposes of the monitoring and/ or setting of limits for any application of solids or liquids to the utilisation area.					Noted	
P1.3	Location of Monitoring /Discharge Points and Areas	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					Noted	
	Table P1.3	EPA Identification Number	Type of Monitoring Point	Location Description				
		3	Water quality monitoring	Loders Creek, at CHPP access road bridge at co-ordinates 323505 6386553 (Easting Northing) identified as point 3 on Figure 2.				
		4	Discharge of saline water under the Hunter River Salinity Trading Scheme (HRSTS) Discharge Quality Volume Monitoring	HRSTS discharge at the end of the discharge pipe from Dam 9 at co-ordinates 321960 6385380 (Easting Northing) identified as point 4 on Figure 2				
		18	Effluent quality monitoring, Discharge to utilisation area	MTO receiving lagoon (Dam 1S) at co-ordinates 321751 6387626 (Easting Northing) identified as point 18 on Figure 3				
P 1.4	Location of Monitoring / Discharge Points and Areas	The following points referred to in the table below are in this licence for the purposes of weather and/ or noise monitoring and/ or setting limits for the emission of noise from the premises.					Noted	
	Table P1.4	EPA Identification Number	Type of Monitoring Point	Location Description				
		5	Air blast overpressure & ground vibration peak particle velocity monitoring	Blast monitor "Warkworth" at co-ordinates 314311 6394906 (Easting Northing) identified as point 5 on Figure 2.				
		6	Air blast overpressure & ground vibration peak particle velocity monitoring	Blast monitor "Wambo Road" at co-ordinates 313263 6388714 (Easting Northing) identified as point 6 on Figure 2.				
		7	Air blast overpressure & ground vibration peak particle velocity monitoring	Blast Monitor "Bulga Village" at co-ordinates 314252 6385592 (Easting Northing) identified as point 7 on Figure 2.				
		8	Air blast overpressure & ground vibration peak particle velocity monitoring	Blast monitor "Wollemi Peak Road" at co-ordinates 315133 6384578 (Easting Northing) identified as point 8 on Figure 2.				
		9	Air blast overpressure & ground vibration peak particle velocity monitoring	Blast monitor "Putty Road - MTIE" at co-ordinates 322584 6389730 (Easting Northing) identified as point 9 on Figure 2.				
		14	Meteorological Station	Meteorological station at co-ordinates 318484 6387405 (Easting Northing) identified as point M4.1 on Figure 2.				
P1.5	Location of Monitoring / Discharge Points and Areas	For the purpose of condition P1.1, P3.1 and P4.1, Figure 2 refers to Plan titled 'MTO EPL 1976' dated 29 May 2018 representing air, blasting, water and meteorological monitoring points EPA Ref DOC18/346356.					Noted	
P1.6	Location of Monitoring / Discharge Points and Areas	For the purpose of condition P1.3, Figure 3 refers to Plan titled 'MTO EPL 1976' dated 29 May 2018 that shows sewage treatment plant infrastructure EPA Ref DOC18/346356.					Noted	

Environment Protection Licence (EPL 1976) Mt Thorley																				
Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations												
P1.7	Location of Monitoring / Discharge Points	The datum for grid references in this licence is the Geodetic Datum of Australia 1994 (GDA94). Zone 56.					Noted													
L1.1	Pollution of Waters	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.	Annual Return (AR) Non-Compliance Detail Licence Number 1976, 01 April 2022 – 31 March 2022 (EPA Website) Annual Return Non-Compliance Detail Licence Number 1976, 01 April 2021 – 31 March 2022 (EPA Website) Annual Return Non-Compliance Detail Licence Number 1976, 01 April 2022 – 31 March 2023 (EPA Website)			The following non-compliances were reported during the Audit Period: <ul style="list-style-type: none"> Dam 1S overtopped as a result of heavy or sustained rainfall which caused significant runoff (2023 AR) Dam 1S overtopped as a result of heavy or sustained rainfall which caused significant runoff (2021 AR) Discharge from 9S via spillway to Loders Creek (2021 AR) 	Non-compliant	A risk assessment and review of the storage capacity of the retention dams be undertaken that takes into account the increasing risk of extreme weather events, including extended duration wet weather patterns.												
L2.1	Concentration Limits	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.	Annual Return (AR) Non-Compliance Detail Licence Number 1976, 01 April 2022 – 31 March 2022 (EPA Website) Annual Return Non-Compliance Detail Licence Number 1976, 01 April 2021 – 31 March 2022 (EPA Website) Annual Return Non-Compliance Detail Licence Number 1976, 01 April 2022 – 31 March 2023 (EPA Website) Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023			One non-compliance was reported during the audit period. During 2021 one Grab Sample at Licensed Discharge and Monitoring Point 4 exceeded the upper 100 percentile limit for pH.	Non-compliant	This single exceedance of the water quality criteria has been investigated. No systemic issues have been identified therefore no further actions are recommended.												
L2.2	Concentration Limits	Where a pH quality limit is specified in the table, the specified percentage of samples must be within the specified ranges.	Annual Return – Mt Thorley Operations Pty Limited Licence 1976 (01-04-2019 to 31-03-2020) Annual Return – Mt Thorley Operations Pty Limited Licence 1976 (01-04-2020 to 31-03-2021) Annual Return – Mt Thorley Operations Pty Limited Licence 1976 (01-04-2021 to 31-03-2022)			One non-compliance was reported during the audit period. During 2021 one Grab Sample at Licensed Discharge and Monitoring Point 4 exceeded the upper 100 percentile limit for pH.	Non-compliant	This single exceedance of the water quality criteria has been investigated. No systemic issues have been identified therefore no further actions are recommended.												
L2.3	Concentration Limits	To avoid any doubt, this condition does not authorise the pollution of waters by any pollutant other than those specified in the table/s.					Noted													
L2.4	Concentration Limits	Water and/ or Land Concentration Limits.					Noted													
L 2.4	Table L2.4	<table border="1"> <thead> <tr> <th colspan="3">Point 4</th> </tr> <tr> <th>Pollutant</th> <th>Units of Measure</th> <th>100 percentile concentration limit</th> </tr> </thead> <tbody> <tr> <td>pH</td> <td>pH</td> <td>6.5-9.5</td> </tr> <tr> <td>TSS</td> <td>Milligrams per litre</td> <td>120</td> </tr> </tbody> </table>	Point 4			Pollutant	Units of Measure	100 percentile concentration limit	pH	pH	6.5-9.5	TSS	Milligrams per litre	120						
Point 4																				
Pollutant	Units of Measure	100 percentile concentration limit																		
pH	pH	6.5-9.5																		
TSS	Milligrams per litre	120																		

Environment Protection Licence (EPL 1976) Mt Thorley								
Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
L3.1	Volume and Mass Limits	For each discharge point or utilisation area specified below (by a point number), the volume/ mass of: a) Liquids discharged to water; or	Annual Return – Mt Thorley Operations Pty Limited Licence 1976 (01-04-2019 to 31-03-2020) Annual Return – Mt Thorley Operations Pty Limited Licence 1976 (01-04-2020 to 31-03-2021) Annual Return – Mt Thorley Operations Pty Limited Licence 1976 (01-04-2021 to 31-03-2022)			The volumes of water discharged from point 4 as reported in the Annual Return documents (B2: Volume of Mass Monitoring Summary) are as follows: - 2021 – 43.1 ML/d (mean) 75.2 ML/d (Max) - 2022 - 40.6 ML/d (mean) 77.1 ML/d (Max) - 2023 - 45.3 ML/d (mean) 76.8 ML/d (Max)	Complies	
L3.1	Volume and Mass Limits	b) Solids or liquids applied to the area; must not exceed the volume/ mass limit specified for that discharge point or area.	Annual Return – Mt Thorley Operations Pty Limited Licence 1976 (01-04-2019 to 31-03-2020) Annual Return – Mt Thorley Operations Pty Limited Licence 1976 (01-04-2020 to 31-03-2021) Annual Return – Mt Thorley Operations Pty Limited Licence 1976 (01-04-2021 to 31-03-2022)			The volumes of water discharged from point 4 as reported in the Annual Return documents (B2: Volume of Mass Monitoring Summary) are as follows: - 2021 – 43.1 ML/d (mean) 75.2 ML/d (Max) - 2022 - 40.6 ML/d (mean) 77.1 ML/d (Max) - 2023 - 45.3 ML/d (mean) 76.8 ML/d (Max)	Complies	
L3.1	Table L3.1	Point 4	Unit of Measure Megalitres per day	Volume /Mass Limit 100				
L4.1	Waste	The licensee must not cause, permit or allow any waste to be received at the premises unless specified in the licence.		Environment and Community Manager – no wastes are accepted from other sites.	No evidence of wastes imported from off-site were observed.	No unapproved waste wastes were received at the Premises during the audit period.	Complies	
L4.2	Waste	The Licensee is authorized to receive mine water from Warkworth Mine, Bulga Mine, Hunter Valley Operations Mine and Redbank Power Station for storage and use in activities authorized by this licence.					Noted	
L4.3	Waste	The Licensee is authorised to transfer mine water to Warkworth, Bulga Mine, Hunter Valley Operations Mine and Redbank Power Station.					Noted	
L5.1	Blasting	Blasting in or on the premises must only be carried out between 0700 hours and 1800 hours, Monday to Saturday. Blasting on the premises must not take place on Sundays or Public Holidays without prior approval of the EPA.	Blasting Records – 2020 Blasting Records – 2021 Blasting Records – 2022 Blasting Records – 2023	Environment and Community Manager – all blasts occurred within permitted times		The detailed records show the time and dates for each blast. Samples of the blasting data confirms compliance.	Complies	
L5.2	Blasting	The airblast overpressure level from blasting operations in or on the premises must not exceed;115 dB (Lin Peak) at any time; at either monitoring point 5,6,7,8, or 9 in Condition P1.4.	Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023			Annual Review documents reported the following relating to blasting. <ul style="list-style-type: none">2020 – no non compliances identified2021 - no non compliances identified2022 – no non compliances identified	Complies	
L5.3	Blasting	The airblast overpressure level from blasting operations in or on the premises must not exceed: 120 dB (Lin Peak) at any time; at either monitoring point 5, 6, 7, 8, and 9 in Condition P1.4.	Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023			Annual Review documents reported the following relating to blasting. <ul style="list-style-type: none">2020 – no non compliances identified2021 - no non compliances identified2022 – no non compliances identified	Complies	
L5.4	Blasting	The ground vibration peak particle velocity from blasting operations carried out in or on the premises must not exceed; <ul style="list-style-type: none">5mm/ second for more than 5% of the total number of blasts during each reporting period; At either monitoring point 5, 6, 7, 8, or 9 in Condition P1.4	Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023			Annual Review documents reported the following relating to blasting. <ul style="list-style-type: none">2020 – no non compliances identified2021 - no non compliances identified2022 – no non compliances identified	Complies	

Environment Protection Licence (EPL 1976) Mt Thorley

Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
L5.5	Blasting	The ground vibration peak particle velocity from blasting operations carried out in or on the premises must not exceed: 10mm/ second at any time; a) At either monitoring point 5, 6, 7, 8, or 9 in Condition P1.4	Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023			Annual Review documents reported the following relating to blasting <ul style="list-style-type: none"> 2020 – no non compliances identified 2021 - no non compliances identified 2022 – no non compliances identified 	Complies	

L5.6	Blasting	Offensive blast fume must not be emitted from the premises. <i>Definition: Offensive blast fume means post-blast gases from the detonation of explosives at the premises that by reason of their nature, duration, character or quality, or the time at which they are emitted, or any other circumstances;</i> 1. Are harmful to (or likely to be harmful) a person that is outside the premises from which it is emitted, or 2. Interferes unreasonably with (or is likely to interfere unreasonably with) the comfort or repose of a person who is outside the premises from which it is emitted.	Complaints Register Incident Register			There were no incidents reported during the audit period relating to offensive blast fume. Ten blasts were undertaken at Mt Thorley during the audit period in 2020. No blasts were undertaken during 2021, 2022 or 2023.	Complies	
O 1.1	Activities to be carried out in a competent manner	Licenced activities must be carried out in a competent manner. This includes: a) The processing, handling, movement and storage of materials and substances used to carry out the activity; and			Activities on site were observed to be undertaken in a competent manner effective management controls, supervision and management systems implemented to ensure compliance	Activities on site were observed to be undertaken in a competent manner effective management controls, supervision and management systems implemented to ensure compliance	Complies	
		b) The treatment, storage, processing, reprocessing, transport and disposal of waste generated by the activity.			All waste management facilities observed on site were appropriate to the scale and nature of the operations (Refer to Photograph 10).	All waste activities observed on site were appropriate to the scale and nature of the operations	Complies	
O2.1	Maintenance of Plant and Equipment	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	Plant and Equipment maintenance records.	Maintenance Manager demonstrated the operation of the mine Maintenance Management System. The system provides a framework for the management of routine maintenance and the identification and rectification of plant and equipment issues.	Designated equipment maintenance areas were inspected. Complex management systems and equipment are implemented to plan and record routine servicing and unplanned maintenance for items of plant, including coal trucks, drill rigs etc. Photograph 11 shows the heavy plant maintenance facility at Mt Thorley.	Designated equipment maintenance areas were inspected. Complex management systems and equipment are implemented to plan and record routine servicing and unplanned maintenance for items of plant, including coal trucks, drill rigs etc. The maintenance management system implemented at the mine are designed to ensure the efficient operation of plant and equipment were comprehensive	Complies	
		b) Must be operated in a proper and efficient manner.			Equipment observed during the site audit was observed to be operating in a proper and efficient manner. A Systems implemented to ensure the efficient operation of plant and equipment were comprehensive	Equipment observed during the site audit was observed to be operating in a proper and efficient manner.	Complies	

Environment Protection Licence (EPL 1976) Mt Thorley								
Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
O2.2	Maintenance of Plant and Equipment	The sewage treatment system must be serviced by a suitably qualified and experienced wastewater technician at least once in each quarterly period and a minimum of four times per year.	Quarterly maintenance records			Quarterly maintenance records were sighted covering the audit period.	Complies	
O2.3	Maintenance of Plant and Equipment	The licensee must record each inspection and any actions required or recommended by the technician including all results of tests performed on the sewage treatment system by the technician as required in Condition O2.2.	Quarterly maintenance records			Quarterly sewage plant maintenance records were sighted and found to comply with this condition.	Complies	
O2.4	Maintenance of Plant and Equipment Maintenance of Plant and Equipment	The licensee must prepare a sewage treatment system maintenance program. The program must include; Provide written records of each quarterly inspection.	Quarterly maintenance records			Quarterly sewage plant maintenance records were sighted and found to comply with this condition.	Complies	
		a) Date, time and results of all routine maintenance procedures undertaken to the sewage treatment system; and						
		b) Certification from a technician that the sewage system is operating at its capacity	Quarterly maintenance records			Quarterly sewage plant maintenance records were sighted and found to comply with this condition.	Complies	
		c) The sewage treatment system must be serviced by a suitably qualified and experienced wastewater technician at least once in each quarterly period and a minimum of four times per year.	Quarterly maintenance records			Quarterly sewage plant maintenance records were sighted and found to comply with this condition.	Complies	
O3.1	Dust	The premises must be maintained in a condition which minimizes or prevents the emission of dust from the premises.	Air Quality Management Plan, Mt Thorley Warkworth, Rev 4.1 dated 28 July 2022 Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023		During the site inspection, the Auditor observed water carts in operation. The auditor noted that minor dust was being generated within the operating open cut and on haul roads, and in areas that were being stripped in preparation for mining, although not evidence that visual dust was leaving the site at the time of the site inspection. Significant areas of the site have been cleared and progressive rehabilitation works are behind schedule. The Auditor also observed significant areas, that while not ready for final rehabilitation, would benefit from temporary stabilisation to help reduce dust emissions during adverse wind conditions.	Fifty-eight dust-related complaints were received during the audit period. Significant areas of the site have been cleared and progressive rehabilitation works are behind schedule. The Auditor also observed areas, that while not ready for final rehabilitation, would benefit from temporary stabilisation to help reduce dust emissions during adverse wind conditions. While no exceedances in dust criteria were reported during the audit period, the number of dust related complaints and the Auditor's observations relating to rehabilitation and stabilisation indicate that nuisance dust emissions are being generated by the mine.	Non-compliant	Increase the rate of progressive rehabilitation works with the objective of meeting the established progressive rehabilitation targets. Prepare and implement a program for the stabilisation of unsealed / disturbed areas of the site including stockpiles, finished landforms, and disturbed areas that are not currently being actively worked / filled). The program should identify and classify all areas of the site that are currently disturbed according to the dust generation potential of those areas and establish clear targets for the stabilisation of those areas (either permanent or temporary) with the objective of meeting the requirements of the Blue Book.

Environment Protection Licence (EPL 1976) Mt Thorley								
Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
O3.2	Dust	All trafficable areas, coal storage and vehicle manoeuvring areas in or on the premises must be maintained, at all times, in a condition that will minimise the generation, or emission from the premises, of wind-blown or traffic generated dust.			Trafficable areas are well delineated. Water carts were in operation at the time of the IEA site inspection.	As observed during the audit inspection. Guide-posts have been installed to define trafficable areas and restrict vehicle movements to those areas. Water carts were in operation at the time of this audit.	Complies	
O3.3	Dust	All operations and activities occurring at the premises must be carried out in a manner that will minimise the emission of dust from the premises.	Air Quality Management Plan, Mt Thorley Warkworth, Rev 4.1 dated 28 July 2022		The operations observed during the site audit were being managed appropriately to minimise dust generation.	As observed during the audit inspection all operational areas of the site were managed appropriately to minimise the generation of dust. Water carts are deployed to wet down internal roads and minimise dust generation. It was noted however that the site contains significant areas that have been disturbed and that progressive rehabilitation works are behind schedule).	Complies	
O4.1	Effluent application to land	Application of wastewaters must only be applied at a rate that can be assimilated by the effluent discharge utilisation area and its evapotranspiration capacity.		Environment and Community Manager - At MTO treated effluent is discharged to Point 18 - Dam 1S. No evapotranspiration area.		Effluent is discharged to Point 18 - Dam 1S. No evapotranspiration area.	Not Triggered	
O4.2	Effluent application to land	The license must ensure that the effluent discharge utilisation area perimeter is fenced and signposted "Effluent Re-Use Area Keep Out" and controlled in a manner to ensure exclusion of persons from that area.		Environment and Community Manager - Dam 1S is the only effluent discharge utilisation area on EPL1976. Dam 1S is located within the mining operations area of Mount Thorley Operations. Dam 1S and is accessed for sampling and mine water management pump operations. Signs shown in RFI-03 folder for this condition.	Dam 1S – the dam is signposted as an effluent reuse area (Photograph 12).	Effluent is approved for dust suppression at Mt Thorley. The site is secure from public access and Dam S1 is appropriately signposted.	Complies	
O5.1	Emergency Response	The licensee must maintain, and implement as necessary, a current Pollution Incident Response Management Plan (PIRMP) for the premises. The licensee must always keep the incident response plan on the premises. The incident response plan must document systems and procedures to deal with all types of incidents (e.g. spills, explosions or 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. The licensee must develop a Pollution Incident Response Management Plan in accordance with the requirements in Part 5.7A of the Protection of the Environment Operations (POEO) Act 1997 and POEO regulations.	Pollution Incident Response Management Plan – Mount Thorley Warkworth, revision 10 dated 1 October 2019. EPA Website – Summary Licence 1976			The PIRMP is placed on the MTW website and includes the following information: <ul style="list-style-type: none"> Regulatory requirements and duty to notify Environmental hazards and pollution inventory Key contact details Notification procedure (internal and external) Emergency Contact details Training, testing, reviewing and communicating the plan The EPA website notes the latest test of the PIRMP was undertaken on the 4 th of November 2022. The next testing for the PIRMP is on the 4 th of November 2023	Complies	Update the PIRMP Testing Summary (Page 3) to include the test undertaken between 2019 and November 2022.
O6.1	Other Operating Conditions	There must be no incineration or open burning of any material(s) on the premises, except as specifically authorized by the EPA.			No evidence of incineration or burning of waste materials was observed during the site inspection.	There was no incineration or open burning of any materials on the premises observed during the audit inspection, or reported during the audit period	Complies	

Environment Protection Licence (EPL 1976) Mt Thorley								
Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
O6.2	Other Operating Conditions	All above ground tanks containing material that is likely to cause environmental harm must be banded or have an alternative spill containment system in place.			Above ground tanks used for fuels and oils were observed to have appropriate bunding and spill control systems in place.	Above ground tanks used for fuel and other liquids were observed to have appropriate bunding and spill control systems in place.	Complies	
M1.1	Monitoring Records	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.					Noted	
M1.2	Monitoring Records	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;	Monthly Environmental Monitoring Reports (MTW Website) Monthly Environmental Monitoring Reports (MTW Website)			All records reviewed during the audit were in a legible form. Monitoring records from 2017 were sighted on the MTW website.	Complies	
		b) Kept for at least 4 years after the monitoring or event to which they relate took place; and					Noted	
		c) Produced in a legible form to any authorized officer of the EPA who asks to see them	Monthly Environmental Monitoring Reports (MTW Website)			All records reviewed during the audit were in a legible form.	Complies	
M1.3	Monitoring Results	The following records must be kept in respect of any samples required to be collected for the purposes of this licence; a) The date(s) on which the sample was taken;	MTW surface water sampling and testing records			Surface water and effluent sampling and testing records were sighted including monthly consultant reports from AECOM. The records include description of the approved AS methods, COC, and lab results. This includes this information required by M1.3 being sample dates, times, point and sampler's name.	Complies	
		b) the time(s) at which the sample was collected;					Complies	
		c) The point at which the sample was taken; and					Complies	
		d) The name of the person who collected the sample					Complies	
M2.1	Requirement to monitor concentration of pollutants discharged	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.	Annual Return (AR) Non-Compliance Detail Licence Number 1976, 01 April 2022 – 31 March 2022 (EPA Website) Annual Return Non-Compliance Detail Licence Number 1976, 01 April 2021 – 31 March 2022 (EPA Website) Annual Return Non-Compliance Detail Licence Number 1976, 01 April 2022 – 31 March 2023 (EPA Website)			During 2021, 2022 and 2023 Table M2.2 requires continuous PM10 monitoring for EPA air monitoring points 10,11,13 and 19. Monitoring data capture was >98% but not continuous during the reporting period. During 2021, 2022 and 2023 Table M2.3 requires continuous monitoring for pH at Point 4 during Discharge Monitoring data capture was >99% but not continuous during the reporting period. During 2021, 2022 and 2023 Table M2.3 requires continuous monitoring for conductivity at Point 4 during Discharge Monitoring data capture was >99% but not continuous during the reporting period.	Non-compliant	Ensure that all continuous monitoring equipment is operational and well maintained.

Environment Protection Licence (EPL 1976) Mt Thorley								
Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
M2.2	Monitoring	Air Monitoring Requirements:						
	Table M2.2	Point 10,11,13,19						
		Pollutant	Units of Measure	Frequency	Sampling method			
		PM10	Micrograms per cubic metre	continuous	Special Method 1			
		Note: Special Method 1 requires the Licensee to undertake the monitoring of PM10 concentration in strict accordance with the manufacturer's operating manual supplied with the continuous monitoring equipment and titled "Model 8530/85318532 Dust Track™ II Aerosol Monitor Operation and Service Manual (P/N 6001893, Revision A, September 2008", or any updated version as published by the manufacturer						
M 2.3	Monitoring	Water and/or Land Monitoring Requirements						
	Table M2.3	Pollutant	Units of Measure	Frequency	Sampling method			
		Point 3						
		Conductivity	micro siemens per centimetre	Once a month	Grab sample			
		pH	pH	Once a month	Grab sample			
		Total Suspended Solids	milligrams per litre	Once a month	Grab sample			
		Point 4						
		Conductivity	micro siemens per centimetre	Continuous during discharge	A probe designed to measure the range 0 to 10,000 uS/cm			
		pH	pH	Daily during any discharge	Grab sample			
		Total Suspended Solids	milligrams per litre	Daily during any discharge	Grab sample			
		Point 18						
		Faecal Coliforms	colony forming units per 100 millilitres	Quarterly	Grab sample			
		pH	pH	Quarterly	Grab sample			
M 3.1	Testing Methods – Concentration Limits	Monitoring for the concentration of a pollutant emitted to the air required to be conducted by this licence must be done in accordance with: <ul style="list-style-type: none"> 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. 	Air Emission Testing Records covering the audit period.	Environment and Community Manager - Monitoring is done in accordance with Special Method 1 - manufacturers operating manual for the Dustraks. The manufacturers operating manual, evidence of an annual calibration certificate, maintenance register are maintained by MTW.		Air quality monitoring is undertaken by approved methods.	Complies	
M3.2	Testing Methods – Concentration Limits	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 unless another method has been approved by the EPA in writing before any tests are conducted.	Water Testing Records covering the audit period.			Water testing is undertaken by approved methods.	Complies	
M3.3	Testing Methods – Concentration Limits	Sampling, storage and analysis of electrical conductivity by grab sample is permitted to be undertaken in accordance with AECOM Australia Method; Conductivity by classical using APHA 2510 B (EPA approval DOC18/17513-08).					Noted	
M3.4	Testing Methods – Concentration Limits	Sampling, storage and analysis of pH by grab sample is permitted to be undertaken in accordance with AECOM Australia Method; pH by classical using APHA 4500 H+B (EPA Approval DOC18/17513-08).					Noted	
M4.1	Weather Monitoring	The licence must collect and analyse meteorological data on the premises for each weather 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	Annual Return (AR) Non-Compliance Detail Licence Number 1976, 01 April 2022 – 31 March 2022 (EPA Website) Annual Return Non-Compliance Detail Licence Number 1976, 01 April 2021 – 31 March 2022 (EPA Website) Annual Return Non-Compliance Detail Licence Number 1976, 01			As reported in the 2021, 2022 and 2023 Annual Returns, M4.1 requires continuous monitoring for Charlton Ridge Meteorological Station. Monitoring Data Capture was not continuous during the reporting period.	Non-compliant	Ensure that all continuous monitoring equipment is operational and well maintained.

Environment Protection Licence (EPL 1976) Mt Thorley									
Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations	
			April 2022 – 31 March 2023 (EPA Website)						
	Table M4.1	Meteorological Monitoring							
		Parameter	Units of Measure	Frequency	Sampling Method				
		Air Temperature	0C	Continuous	Thermometer				
		Wind direction		Continuous	AM-2 & AM-4 (see note 1)				
		Wind Velocity	mm/sec	Continuous	AM-2 & AM-4 (see note 1)				
		Rainfall	mm	Daily	Rain gauge				
		Note: 1: Methods AM-2 & AM-4 are specified in the Approved Methods for the Sampling and Analysis of Air Pollutants in NSW and all monitoring must be conducted strictly in accordance with the requirements outlined in this document.							
M5.1	Recording of Pollution Complaints	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.	MTW Complaints Register			A legible record of complaints is kept	Complies		
M5.2	Recording of Pollution Complaints	The record must include details of the following:	Complaints Register			The date and time of complaints are recorded on the MTW complaints register	Complies		
		a) The date and time of the complaint;	Complaints Register			The Complaints Register includes the details of how the complaint was made.	Complies		
		b) The method by which the complaint was made;	Complaints Register			The name of the complainant is recorded on the MTW complaints register	Complies		
		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	Complaints Register			The name of the complainant is recorded on the MTW complaints register	Complies		
		d) The nature of the complaint;	Complaints Register			The complaints register includes the details of the immediate actions taken	Complies		
		e) The action taken by the licensee in relation to the complaint, including any follow-up contact with the complainant; and	Complaints Register			The Complaints Register includes, when appropriate, details of why no action was taken.	Complies		
	f) If no action was taken by the licensee, the reasons why no action was taken.	Complaints Register							
M5.3	Recording of Pollution Complaints	The record of a complaint must be kept for at least 4 years after the complaint was made.	Complaints Register Website Complaints Summary			Details of complaints are kept for at least 4 years.	Complies		
M5.4	Recording of Pollution Complaints	The record must be produced to any authorised officer of the EPA who asks to see them.					Noted		
M6.1	Telephone complaints line	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.	Contact Us - MOUNT THORLEY WARKWORTH COAL OPERATIONS LIMITED (mtwcoal.com.au)			The MTW website provides the details of a community complaints hotline which is available 24 hours a day.	Complies		
M6.2	Telephone complaints line	The licensee must notify the public of the complaints like telephone number and the fact that it is a complaints line so that the impacted community knows how to make a complaint.	Contact Us - MOUNT THORLEY WARKWORTH COAL OPERATIONS LIMITED (mtwcoal.com.au)			The website clearly notes that the contact telephone number is a complaints line so there is no confusion.	Complies		
M6.3	Telephone complaints line	The preceding two conditions do not apply until 3 months after: the date of the issue of this licence.					Noted		
M7.1	Requirement to monitor volume or mass	For each discharge point or utilisation area specified below, the licensee must monitor; The volume of liquids discharged to water or applied to the area;	Annual Return (AR) Non-Compliance Detail Licence Number 1976, 01 April 2022 – 31 March 2022 (EPA Website)			Table M7.1 requires continuous monitoring for volumetric flow at Point 4 during discharge. During 2021 monitoring data capture was not continuous during the reporting period.	Non-compliant	Ensure that all continuous monitoring equipment is operational and well maintained.	
		a) The mass of solids applied to the area;	Annual Return Non-Compliance Detail Licence Number 1976, 01 April 2021 – 31 March 2022 (EPA Website)						
		b) The mass of pollutants emitted to the air;	Annual Return Non-Compliance Detail Licence Number 1976, 01 April 2022 – 31 March 2023						
		c) At the frequency and using the method and units of measure, specified below.							

Environment Protection Licence (EPL 1976) Mt Thorley								
Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
M7.1	Table M7.1	Point 4						
		Frequency	Unit of Measure	Sampling Method				
		Continuous during discharge	megalitres per day	Ultrasonic flow meter				
M8.1	Blasting	To determine compliance with conditions L4.2, L4.3, L4.4 and L4.5; a) air blast overpressure and ground vibration levels must be measured and electronically recorded for monitoring points 5, 6, 7, 8, and 9 for the parameters specified in Column 1 of the table below; and	Blasting Records – 2020 Blasting Records – 2021 Blasting Records – 2022 Blasting Records – 2023			Blast monitoring was undertaken at the prescribed locations throughout the audit period.	Complies	
		b) The licensee must use the units of measure, sampling method, and sample at the frequency specified opposite in the other columns.	Blasting Records – 2020 Blasting Records – 2021 Blasting Records – 2022 Blasting Records – 2023			Blast monitoring results are recorded using the units as specified in this condition.	Complies	
	Table M8.1							
		Parameter	Units of Measure	Frequency	Sampling Method			
		Airblast Overpressure	Decibels (Linear Peak)	All Blasts	Australian Standard AS 2187.2-2006			
		Ground Vibration Peak Particle Velocity	millimetres/second	All Blasts				
M9.1	HRSTS Monitoring	HRSTS Monitoring – The licensee must continuously operate and maintain communication equipment which makes the conductivity and flow measurements, taken at Point 4 available to the “Service Coordinator” within one hour of those measurements being taken and makes them available in the format specified in the “Hunter River Salinity Trading Scheme Discharge Point Telemetry Specification – Rev V1.0 released 4 October 2018” as published by Water NSW.		Environment and Community Manager - Maintenance of the system is subject to a maintenance contract with Benchmark Monitoring. The WML system has not been used in the audit period, however it is maintained with sensors and comms to the Water NSW telemetry system.		The WML system has not been used in the audit period, however it continues to be maintained	Complies	
M9.2	HRSTS Monitoring	The licensee must ensure that all monitoring data is within a margin of error of 5% for conductivity measurements and 10% for discharge flow measurement.	https://hydrotel.waternsw.com.au/hrsts.html			Monitoring data is provided to Water NSW and is available via their website.	Complies	
M9.3	HRSTS Monitoring	The licence must mark monitoring point(s) 4, with a sign which clearly indicates the name of the licensee, whether the monitoring point is up or down stream of the discharge point(s) and that it is a monitoring point for the Hunter River Salinity Trading Scheme.			Signage was observed in the field with the required information	The signage with the required information was observed during the site inspection at the point of discharge	Complies	
M9.4	Requirement to Monitor Particulate Matter	– The Licensee must record the average PM10 concentration at Monitoring Points 10, 11, 12 and 13 at intervals of 10 minutes. This data must be made available upon request by any Authorised Officer of the EPA who asks to see them.	Annual Return – Mt Thorley Operations Pty Limited Licence 1976 (01-04-2019 to 31-03-2020) Annual Return – Mt Thorley Operations Pty Limited Licence 1976 (01-04-2020 to 31-03-2021) Annual Return – Mt Thorley Operations Pty Limited Licence 1976 (01-04-2021 to 31-03-2022)			Section B2 of each Annual Return document provides a summary of PM 10 monitoring from Points 10,11, 13 and 19. Table P1.1 specifies which monitoring locations are required for monitoring PM ₁₀ levels. That table specifies points 10,11,13 and 19. This condition (M9.4) specifies points 10,11,12 and 13. The Auditor believes that this is a typographical error and that the monitoring points specified in Condition P1.1 are correct.	Complies	Consult with the EPA and seek an amendment to EPL 1976 to remove the typographical error in Condition M9.4.

Environment Protection Licence (EPL 1976) Mt Thorley								
Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
R1.1	Reporting Condition	The licensee must complete and supply to the EPA an Annual Return in the approved form comprising;	Annual Return – Mt Thorley Operations Pty Limited Licence 1976 (01-04-2019 to 31-03-2020) Annual Return – Mt Thorley Operations Pty Limited Licence 1976 (01-04-2020 to 31-03-2021) Annual Return – Mt Thorley Operations Pty Limited Licence 1976 (01-04-2021 to 31-03-2022)			Annual Returns were provided to the EPA for each year within the reporting period in the standard EPA form	Complies	
		1. A Statement of Compliance				Section A of each Annual Return includes a Statement of Compliance	Complies	
		2. A Monitoring and Complaints Summary				Section B of each Annual Return includes a monitoring and complaints summary	Complies	
		3. A Statement of Compliance – Licence Conditions				Section C of each Annual Return includes a statement of compliance with License conditions	Complies	
		4. A Statement of Compliance – Load based Fee				Section D of each Annual Return includes a statement of compliance – Load based fee calculation	Complies	
		5. A Statement of Compliance – Requirement to Prepare Pollution Incident Response Management Plan				Section E of each Annual Return includes a statement of compliance Requirement to prepare a PIRMP	Complies	
		6. A Statement of Compliance – Requirement to Publish Pollution Monitoring Data and				Section F of each Annual Return includes a statement of compliance – Requirement to Publish Pollution Monitoring data	Complies	
		7. A Statement of Compliance - Environmental Management Systems and Practices				Section G of each Annual Return includes a statement of compliance – Requirement to Publish Pollution Monitoring data	Complies	
		At the end of each reporting period, the EPA will provide to the licensee notification that the Annual Return is due.						Noted
R1.2	Reporting Condition	The Annual Return must be prepared in respect of each reporting period, except as provided below. Note: The term “reporting period” is defined in the dictionary at the end of this licence. Do not complete the Annual Return until after the end of the reporting period.					Noted	
R1.3	Reporting Condition	Where this licence is transferred from the licensee to a new licensee; a) The transferring licensee must prepare an Annual Return for the period commencing on the first day of the reporting period and ending on the date the application for the transfer of the licence to the new licensee is granted; and				EPL not transferred during the audit period	Noted	
		b) The new licensee must prepare an Annual Return for the period commencing on the date the applicant for the transfer of the licence is granted and ending on the last day of the reporting period. Note: An application to transfer a licence must be made in the approved form for this purpose.				EPL not transferred during the audit period	Noted	
R1.4	Reporting Condition	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;				The EPL won't be surrendered until after the operations are ceased	Noted	
		a) In relation to the surrender of a licence – the date when notice in writing of approval of the surrender is given; or					Noted	
		b) In relation to the revocation of the licence – the date from which notice revoking the licence operates.					Noted	

Environment Protection Licence (EPL 1976) Mt Thorley								
Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
R1.5	Reporting Condition	The Annual Return for the reporting period must be supplied to the EPA via eConnect EPA or by registered post no 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).	Annual Return Submission details Licence Number 1976 (EPA Website)			The end date for each annual Return is 31 March 2021, 2022, and 2023 respectively. Submission dates for each annual return were as follows: <ul style="list-style-type: none"> 2022 – 26 May 2023 2021 – 27 May 2022 2020 – 28 May 2021 All annual Returns for the reporting period were therefore submitted within the timeframes as required by this condition	Complies	
R1.6	Reporting Condition	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.					Noted	
R1.7	Reporting Condition	Within the Annual Return, the Statements of Compliance must be certified and the Monitoring and Complaints Summary must be signed by; . <ul style="list-style-type: none"> a) The licence holder; or 				The EPL Annual Returns were signed by Directors	Complies	
		<ul style="list-style-type: none"> b) By a person approved in writing by the EPA to sign on behalf of the licence holder 				The EPL Annual Returns were signed by Directors	Complies	
R2.1	Notification of Environmental Harm	Notifications must be made by telephoning the Environmental Line service on 131 555.				There are several examples where incidents have occurred with the potential to cause environmental harm to have been notified the EPA. These include (but are not limited to): <ul style="list-style-type: none"> Water release from dam 9s Spillway (14 May 2020) Water from equipment park area (4 January 2021) The auditee has maintained records of notifications to the EPA as well as activation of the PIRMP	Complies	
R2.2	Notification of Environmental Harm	The licensee must provide written details of the notification to the EPA within 7 days of the date on which they became aware of the incident.	Reportable Incident Correspondence			There have been four incidents reported to EPA during the audit period. Records demonstrate EPA were provided with details of the incident within 7 days of the date they were aware of the incident and in most cases on the same day. In some instances, EPA requested a written report in accordance with R 3.1	Complies	
R2.2	Notification of Environmental Harm	Note: The licensee or its employees must notify all relevant authorities of incidents causing or threatening material harm to the environment immediately after the person becomes aware of the incident in accordance with the requirements of Part 5.7 of the Act.	Reportable Incident Correspondence			There are several instances where overtopping of sediment basins has resulted in the activation of the pollution incident response and the notification of relevant authorities.	Complies	
R3.1	Written Report	Where an authorised officer of the EPA suspects on reasonable grounds that; <ul style="list-style-type: none"> a) Where this licence applies to premises, an event has occurred at the premises; or 	Reportable Incident Correspondence			There have been several incidents relating to the premises where an EPA officer has requested a written report	Noted	
		<ul style="list-style-type: none"> b) Where this licence applies to vehicles or mobile to the environment (whether the harm occurs on or off the premises to which the licence applies), the authorised officer may request a written report of the event. 	Reportable Incident Correspondence			There have been no incidents during the reporting period that have been reported relating to vehicles	Noted	

Environment Protection Licence (EPL 1976) Mt Thorley								
Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
R3.2	Written Report	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.				Reports have been submitted to EPA in accordance with agreed timeframes. In some instances, extensions to timeframes have been sought and agreed with EPA	Complies	
R3.3	Written Report	The request may require a report which includes any or all of the following information:	Letter from Yancoal (G.Mulhearn) to EPA (M Hartwell) titled "Report Ref:Co7612-2020 – Dam 9S Overtopping event, Mount Thorley Operations Pty Ltd			Incident reports have been prepared and submitted to EPA that includes the information as follows:	Complies	
R3.3	Written Report	a) The cause, time and duration of the event;	Letter from Yancoal (G.Mulhearn) to EPA (M Hartwell) titled "Report Ref:Co7612-2020 – Dam 9S Overtopping event, Mount Thorley Operations Pty Ltd			Section 1 a) – Incident Details	Complies	
		b) The type, volume and concentration of every pollutant discharged as a result of the event;	Letter from Yancoal (G.Mulhearn) to EPA (M Hartwell) titled "Report Ref:Co7612-2020 – Dam 9S Overtopping event, Mount Thorley Operations Pty Ltd			Section 1 c) – estimated quantity or volume of any pollutants and the concentration of any pollutants involved	Complies	
		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;	Letter from Yancoal (G.Mulhearn) to EPA (M Hartwell) titled "Report Ref:Co7612-2020 – Dam 9S Overtopping event, Mount Thorley Operations Pty Ltd			EPA correspondence has not requested this information for any of the incidents	Noted	
		d) The name, address and business hours telephone number of every other person (of whom the licence is aware) who witnessed the event, unless the licensee has been unable to obtain the information after making reasonable effort	Letter from Yancoal (G.Mulhearn) to EPA (M Hartwell) titled "Report Ref:Co7612-2020 – Dam 9S Overtopping event, Mount Thorley Operations Pty Ltd			EPA correspondence has not requested this information for any of the incidents	Noted	
		e) Action taken by the licensee in relation to the event, including any follow up contact with any complaints;	Letter from Yancoal (G.Mulhearn) to EPA (M Hartwell) titled "Report Ref:Co7612-2020 – Dam 9S Overtopping event, Mount Thorley Operations Pty Ltd			Section 3 c- provides details of actions planned or proposed	Complies	
		f) Details of any measure taken or proposed to be taken to prevent or mitigate against a recurrence of such an event; and	Letter from Yancoal (G.Mulhearn) to EPA (M Hartwell) titled "Report Ref:Co7612-2020 – Dam 9S Overtopping event, Mount Thorley Operations Pty Ltd			Section 3 c- provides details of actions planned or proposed	Complies	
		g) Any other relevant matters.	Letter from Yancoal (G.Mulhearn) to EPA (M Hartwell) titled "Report Ref:Co7612-2020 – Dam 9S Overtopping event, Mount Thorley Operations Pty Ltd			Provided in report where relevant to the incident	Noted	
R3.4	Written Report	The EPA may make a written report 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.					Noted	
R4.1	Reporting of Exceedance of Blasting Limits	Reporting of Exceedance of Blasting Limits – The licensee must report any exceedance of the licence blasting limits to the regional office of the EPA as soon as practicable after the exceedance becomes known to the licensee or to one of the licensee's employees or agents.	Annual Return (AR) Non-Compliance Detail Licence Number 1976, 01 April 2022 – 31 March 2022 (EPA Website) Annual Return Non-Compliance Detail Licence Number 1976, 01 April 2021 – 31 March 2022 (EPA Website) Annual Return Non-Compliance Detail Licence Number 1976, 01 April 2022 – 31 March 2023 (EPA Website)			As noted in the Annual Return documents, the blasting limits were complied with for the reporting period.	Complies	

Environment Protection Licence (EPL 1976) Mt Thorley								
Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
R4.2	Reporting of Blast Monitoring	Reporting of Blast Monitoring – The results of the blast monitoring required by condition M8.1 must be submitted to the EPA at the end of each reporting period.				The blast monitoring results are included in the Annual Review. Each Annual Review is submitted to EPA (concurrently with the DPE)	Complies	
R4.3	HRSTS Reporting	HRSTS Reporting – The licensee must compile a written report of the activities under the Scheme for each scheme year. The scheme year shall run from 1 July to 30 June each year. The written report must be submitted to the EPA’s regional office within 60 days after the end of each scheme year and be in a form and manner approved by the EPA. The information will be used by the EPA to compile an annual scheme report.	Letter from MTW (G Mulhearn) to the EPA (T Wilson) titled “Mount Thorley Operations HRSTS Report 2019/20”, dated 21 July 2020. Letter from MTW (G Mulhearn) to the EPA (T Wilson) titled “Mount Thorley Operations HRSTS Report 2020/21”, dated 26 August 2021. Letter from MTW (G Mulhearn) to the EPA (T Wilson) titled “Mount Thorley Operations HRSTS Report 2021/22”, dated 29 August 2022.			Annual HRSTS reports were issued to the EPA for each year during the audit period.	Complies	
R4.4	Sewage Treatment Plant Maintenance	Sewage Treatment Plan – The sewage treatment system maintenance program required by Condition O2.4 must be submitted annually to the EPA with the Annual Return.	Letter from MTW (G Mulhearn) to the EPA titled “Mt Thorley Operations Environment Protection Licence (EPL 1976) – Sewage Treatment Plant Maintenance Program Records”, dated 27 May 2020, 24 May 2021, and 18 May 2022.	Environment and Community Manager - The STP maintenance reports are submitted with the maintenance program		The STP Maintenance reports are submitted with the maintenance program	Complies	
R4.5	Sewage Treatment Plant Maintenance	The licensee must retain a copy of each report required by Condition O2.3 for 3 years from the date each record is made.					Noted	
G1.1	Copy of Licence to be kept at the premises or plant	A copy of this licence must be kept at the premises to which the licence applies.	EPL 1976			The EPL was kept on site in printed form in the main site office in an accessible location	Complies	
G1.2	Copy of Licence to be kept at the premises or plant	The licence must be produced to any authorised officer of the EPA who asks to see it.					Noted	
G1.3	Copy of Licence to be kept at the premises or plant	The licence must be available for inspection by any employee or agent of the licensee working at the premises.	EPL 1976				Noted	
G2.1	Completed Programs	Program	Description			Completed Date		
	Table G2.1	The licensee must supply an audit of blast complaints	The licensee must supply an audit of blast complaints received after 12 months of the extension of blasting hours from 1700 to 1800. Trial will ensure that the extension of blasting hours to 6pm has no impact to surrounding environment.			21-December-2005		
		Coal Mine Particulate Matter Control Best Practice	Requires licensee to conduct a site-specific Best Management Practice (BMP) determination to identify ways to reduce particle emissions			30-July-2012		
		Particulate Matter Control Best Practice Implementation – Wheel Generated Dust	Implementation of particulate matter best management practices to address wheel-generated dust.			15-August-2014		
		Particulate Matter Control Best Practice Implementation – Disturbing and Handling Overburden under Adverse Weather Conditions	Implementation of particulate matter best management practices to address the handling of overburden during adverse weather.			15-August-2014		
		Particulate Matter Control Best Practice Implementation - Trial of Best Practice Measures for Disturbing and Handling Overburden	Investigation to establish best practice measures for the handling of overburden.			31-March-2015		
	Coal Mine Wind Erosion of Exposed Land Assessment	Assessment of predicted vs actual exposed lands			31-March-2015			

Environment Protection Licence (EPL 1976) Mt Thorley								
Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
E1.1	Hunter Salinity Trading Scheme (HRSTS)	This licence authorises the discharge of saline water into the Hunter River Catchment from an authorised discharge point (or points), in accordance with the <i>Protection of the Environment Operations (Hunter River Salinity Trading Scheme) Regulation 2002</i> .	Letter from MTW (G Mulhearn) to the EPA (T Wilson) titled "Mount Thorley Operations HRSTS Report 2019/20", dated 21 July 2020. Letter from MTW (G Mulhearn) to the EPA (T Wilson) titled "Mount Thorley Operations HRSTS Report 2020/21", dated 26 August 2021. Letter from MTW (G Mulhearn) to the EPA (T Wilson) titled "Mount Thorley Operations HRSTS Report 2021/22", dated 29 August 2022.	Environment and Community Manager - There were discharges at MTO in 2021 and 2022. These were done in accordance with HRSTS regulation. MTW discharge authorisation checklists which include the conversion factor and are used to do calculation of salt tonnes, total volume and hourly flow rate limits.		Discharges under the HRSTS complied with all water quality criteria during the audit period.	Complies	
E1.2	Hunter Salinity Trading Scheme (HRSTS)	For the purposes of Clauses 23 and 29 of the Protection of the Environment Operations (Hunter River Salinity Trading Scheme) Regulation 2002 the licensee must apply the conversion factor of 0.6.	HRSTS Daily Discharge Checklists (24/3/21, 1/4/21, 4/4/21, 7/12/21, 17/1/22, 5/4/22).	Environment and Community Manager - Discharge calculations used the conversion factor of 0.6. MTW discharge authorisation checklists which include the conversion factor and are used to do calculation of salt tonnes, total volume and hourly flow rate limits.		Discharge calculations used the conversion factor of 0.6.	Complies	
E1.3	Hunter Salinity Trading Scheme (HRSTS)	The licensee must not exceed the hourly volume discharge limit calculated using the following formula, at all discharge point(s) on this licence titled "Discharge of saline water under the Hunter River Salinity Trading Scheme (HRSTS)". H = V/ RRT	Annual Return (AR) Non-Compliance Detail Licence Number 1976, 01 April 2022 – 31 March 2022 (EPA Website) Annual Return Non-Compliance Detail Licence Number 1976, 01 April 2021 – 31 March 2022 (EPA Website) Annual Return Non-Compliance Detail Licence Number 1976, 01 April 2022 – 31 March 2023 (EPA Website)	Environment and Community Manager - This issue was reported to EPA in the 2021 Annual Return. There has been no further correspondence from EPA in relation to this matter. MTW applies sets a conservative hourly flow volume to the maximum permitted HRSTS flow volume to ensure compliance with this licence condition. Subsequent to the incidence this has been further reviewed by our technical control system engineer to confirm it is operating as intended. There were no exceedances of hourly flow rate limit since that incident despite significant use of the discharge on 86 days in the subsequent EPL1976 Annual Return period, which demonstrates the system is working for hourly flow rate.		As reported in the 2021 Annual Return an exceedance of the HRTS hourly volume discharge limit occurred on 20 March 2021. This non-compliance was discovered during the preparation of the 2021 Annual Return. The exceedance event has been reviewed by MTW and the discharge rate modified. No further exceedances have been recorded.	Non-compliant	The single volume exceedance has been investigated and appropriate actions taken to prevent future exceedances. No additional actions have been identified.

Compliance Register

Standard Conditions of Mining Lease Rehabilitation

Appendix A5

Standard Mining Lease Terms (Applies from 2 July 2022)

Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
Conditions 1 to 4 are administrative only								
D1-C4	Protection of the environment and rehabilitation Must prevent or minimise harm to environment	(1) The holder of a mining lease must take all reasonable measures to prevent, or if that is not reasonably practicable, to minimise, harm to the environment caused by activities under the mining lease.	Annual Return (AR) Non-Compliance Detail Licence Number 1976, 01 April 2022 – 31 March 2022 (EPA Website) Annual Return Non-Compliance Detail Licence Number 1976, 01 April 2021 – 31 March 2022 (EPA Website) Annual Return Non-Compliance Detail Licence Number 1976, 01 April 2022 – 31 March 2023 (EPA Website)			During the audit period (2021) non-complying overflows / discharges of water occurred from dams on both the Mt Thorley and Warkworth mines. These pollution events resulted in the issue of Penalty Notices by the EPA and DPE. For further information refer to Section 7.3 and Condition L1.1 on the EPL Compliance Registers above.	Non-compliant	A risk assessment and review of the storage capacity of the retention dams be undertaken that takes into account the increasing risk of extreme weather events, including extended duration wet weather patterns.
		(2) In this clause—harm to the environment has the same meaning as in the <i>Protection of the Environment Operations Act 1997</i> .				Explanatory Clause Only.	Noted	
D1-C5	Protection of the environment and rehabilitation Rehabilitation to occur as soon as reasonably practicable after disturbance	The holder of a mining lease must rehabilitate land and water in the mining area that is disturbed by activities under the mining lease as soon as reasonably practicable after the disturbance occurs.	2020 Annual Review 2021 Annual Review 2022 Annual Review	Environment and Community Manager - MTW has reported to RR and DPE via the Annual Review for 2021 (Section 7.3) and 2022 (Section 7.1) that rehabilitation progress is lagging behind the EIS 2014 rehabilitation projections. The 2022 Annual Review indicated that completed rehabilitation at the end of 2023 is forecast to be 1,368ha which will be 221.8ha (13.8%) less than the EIS forecast detailed in the stage plan for 2023. MTW's view is that rehabilitation is being progressed on areas as soon as possible and that the deficit with the EIS rehab progress just represents a difference in when the EIS projected areas to be available for rehabilitation. MTW has not been subject to any compliance action related to rehabilitation progression, from either RR or DPE.		This condition is considered to be non-compliant as the predicted/forecast target for 2020 was not met and it is predicted that the forecast for 2023 will not be met. It is acknowledged that several factors, including weather conditions, have resulted in lower rehabilitation than predicted. It is noted however that the the MOP rehabilitation targets were exceeded in both 2021 and 2022.	Non-compliant	Continue progressive rehabilitation works with the objective of meeting the established progressive rehabilitation targets
D1-C6	Protection of the environment and rehabilitation Rehabilitation must achieve final land use	(1) The holder of a mining lease must ensure that rehabilitation of the mining area achieves the final land use for the mining area.				The condition has not been triggered and it applies to the final landform,	Not Triggered	
		(2) The holder of the mining lease must ensure any planning approval has been obtained that is necessary to enable the holder to comply with subclause (1).	Planning Approvals: <ul style="list-style-type: none">SSD 6464; andSSD 6465.			The required planning approvals are in place.	Complies	

Standard Mining Lease Terms (Applies from 2 July 2022)

Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
D1-C6	Protection of the environment and rehabilitation Rehabilitation must achieve final land use	(3) The holder of the mining lease must identify and record any reasonably foreseeable hazard that presents a risk to the holder's ability to comply with subclause (1) . Note— Clause 7 requires a rehabilitation risk assessment to be conducted whenever a hazard is identified under this subclause.	Rehabilitation Management Plan Version 1, dated 28 July 2022.			Appendix 1 of the Rehabilitation Management Plan contains the Rehabilitation Risk Assessment. Section 10 identifies the proposed contingency strategies to be implemented in the event of the identification of hazards that may impact final land uses or rehabilitation outcomes.	Complies	
		(4) In this clause—final land use for the mining area means the final landform and land uses to be achieved for the mining area— a. as set out in the rehabilitation objectives statement and rehabilitation completion criteria statement, and				Explanatory Clause Only.	Noted	
D1-C6	Protection of the environment and rehabilitation Rehabilitation must achieve final land use	b. for a large mine—as spatially depicted in the final landform and rehabilitation plan, and				Explanatory Clause Only.	Noted	
		c. if the final land use for the mining area is required by a condition of development consent for activities under the mining lease—as stated in the condition.				Explanatory Clause Only.	Noted	
		Planning Approval Means a) a development consent within the meaning of the <i>Environmental Planning and Assessment Act 1979</i> , or				Explanatory Clause Only.	Noted	
		b) an approval under that Act, Division 5.1.				Explanatory Clause Only.	Noted	
D2-7	Risk Assessment Rehabilitation risk assessment	(1) The holder of a mining lease must conduct a risk assessment (a rehabilitation risk assessment) that— a) identifies, assesses, and evaluates the risks that need to be addressed to achieve the following in relation to the mining lease— (i) the rehabilitation objectives, (ii) the rehabilitation completion criteria (iii) for large mines—the final land use as spatially depicted in the final landform and rehabilitation plan, and	Rehabilitation Management Plan Version 1, dated 28 July 2022.			A Rehabilitation Risk Assessment was completed on 30 May 2022 Appendix 1 of the Rehabilitation Management Plan contains the Rehabilitation Risk Assessment. Section 10 identifies the proposed contingency strategies to be implemented in the event of the identification of hazards that may impact final land uses or rehabilitation outcomes.	Complies	
		b) identifies the measures that need to be implemented to eliminate, minimise or mitigate the risks.	Rehabilitation Management Plan Version 1, dated 28 July 2022.				Complies	

Standard Mining Lease Terms (Applies from 2 July 2022)

Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
D2-7	Risk Assessment Rehabilitation risk assessment	(2) The holder of the mining lease must implement the measures identified.	Annual Rehabilitation Report 2022, Version 2, dated 5 June 2023			The Annual Rehabilitation Report 2022 identifies performance against the agreed rehabilitation performance measures. Six management recommendations were identified to improve the condition of rehabilitation areas and ensure they are trending towards the defined final land use objectives.	Complies	
		(3) The holder of a mining lease must conduct a rehabilitation risk assessment— (a) for a large mine—before preparing a rehabilitation management plan, and (b) for a small mine—before preparing the rehabilitation outcome documents for the mine, and (c) whenever a hazard is identified under clause 6(3)—as soon as reasonably practicable after it is identified, and (d) whenever given a written direction to do so by the Secretary	Rehabilitation Management Plan Version 1, dated 28 July 2022.	Environment and Community Manager - The Secretary has not requested that a further risk assessment be conducted.			A Rehabilitation Risk Assessment was completed on 30 May 2022 Appendix 1 of the Rehabilitation Management Plan contains the Rehabilitation Risk Assessment. Section 10 identifies the proposed contingency strategies to be implemented in the event of the identification of hazards that may impact final land uses or rehabilitation outcomes. The Secretary has not requested that a further risk assessment be conducted.	Complies
D3-8	Records, Reporting and Notification Application of Division 3	(1) This Division does not apply to a mining lease unless— a) the security deposit required under the mining lease is greater than the minimum deposit prescribed under the Act, section 261BF in relation to that type of mining lease, or b) the Secretary gives a written direction to the holder of the mining lease that this Division, or a provision of this Division, applies to the mining lease.				This condition is administrative only. Lodgement of the security deposits required for each of the mining leases was verified in the 2020 IEA. The value of those deposits is greater than the minimum security deposit set under the Mining Act Regulations. Therefore, this division applies.	Noted	
D3-9	Rehabilitation Documents General requirements for documents	A document required to be prepared under this Division must— (a) be in a form approved by the Secretary, and	Rehabilitation Management Plan Version 1, dated 28 July 2022.			The rehabilitation Management Plan has been reviewed by DPE and the Resources Regulator. The final plan has been approved by DPE.	Complies	
		(b) include any matter required to be included by the form, and	Rehabilitation Management Plan Version 1, dated 28 July 2022.			The rehabilitation Management Plan has been reviewed by DPE and the Resources Regulator. The final plan has been approved by DPE.	Complies	
		(c) if required to be given to the Secretary—be given in a way approved by the Secretary.	Rehabilitation Management Plan Version 1, dated 28 July 2022.			The rehabilitation Management Plan has been reviewed by DPE and the Resources Regulator. The final plan has been approved by DPE.	Complies	

Standard Mining Lease Terms (Applies from 2 July 2022)

Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
D3 C10	Rehabilitation Documents Rehabilitation management plans for large mines	(1) The holder of a mining lease relating to a large mine must prepare a plan (a rehabilitation management plan) for the mining lease that includes the following—	Rehabilitation Management Plan Version 1, dated 28 July 2022.			The rehabilitation Management Plan has been reviewed by DPE and the Resources Regulator. The final plan has been approved by DPE.	Complies	
		(a) a description of how the holder proposes to manage all aspects of the rehabilitation of the mining area	Rehabilitation Management Plan Version 1, dated 28 July 2022.			Section 6 of the Rehabilitation Management Plan describes the rehabilitation schedule and methodology.	Complies	
		(b) a description of the steps and actions the holder proposes to take to comply with the conditions of the mining lease that relate to rehabilitation,	Rehabilitation Management Plan Version 1, dated 28 July 2022.			Section 6 of the Rehabilitation Management Plan describes the rehabilitation schedule and methodology.	Complies	
		(c) a summary of rehabilitation risk assessments conducted by the holder,	Rehabilitation Management Plan Version 1, dated 28 July 2022.			Section 3 of the Rehabilitation Management Plan describes risk assessment process and Appendix 1 provides a copy of the risk assessment undertaken as part of the preparation of the plan.	Complies	
		(d) the risk control measures identified in the rehabilitation risk assessments,	Rehabilitation Management Plan Version 1, dated 28 July 2022.			Table 23 describes the actions to be taken to mitigate / manage risks associated with the rehabilitation of the mine.	Complies	
		(e) the rehabilitation outcome documents for the mining lease	Rehabilitation Management Plan Version 1, dated 28 July 2022.			The requirements of the rehabilitation outcome document are provided in Section 4 of the approved Rehabilitation Management Plan. Section 4 presents the rehabilitation objectives and completion criteria.	Complies	
		(f) a statement of the performance outcomes for the matters addressed by the rehabilitation outcome documents and the ways in which those outcomes are to be measured and monitored.	Rehabilitation Management Plan Version 1, dated 28 July 2022.			Section 8 describes the rehabilitation monitoring program.	Complies	
		(2) If a rehabilitation outcome document has not been approved by the Secretary, the holder of the mining lease must include a proposed version of the document.	Rehabilitation Management Plan Version 1, dated 28 July 2022.			The requirements of the rehabilitation outcome document are provided in Section 4 of the approved Rehabilitation Management Plan. Section 4 presents the rehabilitation objectives and completion criteria.	Complies	
		(3) A rehabilitation management plan is not required to be given to the Secretary for approval.				Administrative Condition only	Noted	
(4) The holder of the mining lease— (a) must implement the matters set out in the rehabilitation management plan, and (b) if the forward program specifies timeframes for the implementation of the matters— must implement the matters within those timeframes	Rehabilitation Management Plan Version 1, dated 28 July 2022.				The MOP rehabilitation targets were exceeded in both 2021 and 2022.	Complies		

Standard Mining Lease Terms (Applies from 2 July 2022)

Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
D3 C11	Rehabilitation Documents Amendment of Rehabilitation Plans	The holder of a mining lease must amend the rehabilitation management plan for the mining lease as follows— a) to substitute the proposed version of a rehabilitation outcome document with the version approved by the Secretary—within 30 days after the document is approved	Rehabilitation Management Plan Version 1, dated 28 July 2022.			The Rehabilitation Management Plan was revised and reissued on 28 May 2022 and now includes (Section 4) the requirements for Rehabilitation Outcome Document.	Complies	
		b) as a consequence of an amendment made under clause 14 to a rehabilitation outcome document—within 30 days after the amendment is made,				No amendments to the rehabilitation outcome document have been made during the audit period.	Not Triggered	
		c) to reflect any changes to the risk control measures in the prepared plan that are identified in a rehabilitation risk assessment—as soon as practicable after the rehabilitation risk assessment is conducted,		Environment and Community Manager – No additional rehabilitation risks have been identified during this Audit Period.		No additional rehabilitation risks have been identified during this Audit Period.	Not Triggered	
		d) whenever given a written direction to do so by the Secretary—in accordance with the direction.		Environment and Community Manager – No requests were made by the Resource Regulator for revisions of the RMP.		No requests were made by the Resource Regulator for revisions of the RMP.	Not Triggered	
D3 C12	Rehabilitation Documents Rehabilitation outcome documents	(1) The holder of a mining lease must prepare the following documents (the rehabilitation outcome documents) for the mining lease and give them to the Secretary for approval— a) the rehabilitation objectives statement , which sets out the rehabilitation objectives required to achieve the final land use for the mining area	Rehabilitation Management Plan Version 1, dated 28 July 2022.			Section 4 of the Rehabilitation Management Plan provides a description of the rehabilitation objectives for the complex.	Complies	
		b) the rehabilitation completion criteria statement, which sets out criteria, the completion of which will demonstrate the achievement of the rehabilitation objectives,	Rehabilitation Management Plan Version 1, dated 28 July 2022.			Section 4 of the Rehabilitation Management Plan provides a description of the rehabilitation completion criteria for the complex.	Complies	
		c) for a large mine, the final landform and rehabilitation plan, showing aspatial depiction of the final land use.	Rehabilitation Management Plan Version 1, dated 28 July 2022.			Section 5 of the Rehabilitation Management Plan provides the final landform and rehabilitation plan for the complex.	Complies	
		d) If the final land use for the mining area is required by a condition of development consent for activities under the mining lease, the holder of the mining lease must ensure the rehabilitation outcome documents are consistent with that condition.	Planning Approvals SSD 6464 and SSD 6465			The planning approvals for the MTW complex do not specify requirements for final landuse for either Warkworth or Mt Thorley.	Not Triggered	

Standard Mining Lease Terms (Applies from 2 July 2022)

Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
D3 C13	Rehabilitation Documents Forward program and annual rehabilitation report	(1) The holder of a mining lease must prepare a program (a forward program) for the mining lease that includes the following— a) a schedule of mining activities for the mining area for the next 3 years,	Forward Program – 2023 to 2025 Version 2, dated 5 June 2023.			The first Forward Program required by this Condition has been prepared and has been uploaded to the MTW Website. Section 1.2.3 provides the mining schedule for the next three years.	Complies	
		b) a summary of the spatial progression of rehabilitation through its various phases for the next 3 years,				Section 2.0 provides the three-year rehabilitation forecast that includes the special progression of rehabilitation.	Complies	
		c) a requirement that the rehabilitation of land and water disturbed by mining activities under the mining lease must occur as soon as reasonably practicable after the disturbance occurs.				Section 2.0 provides the three-year rehabilitation forecast.	Complies	
		(2) The holder of a mining lease must prepare a report (an annual rehabilitation report) for the mining lease that includes—	Annual Rehabilitation Report – 2022, Version 2.0, dated 1 May 2023.			The 2022 annual report has been prepared and is available on the MTW website.	Complies	
		(a) a description of the rehabilitation undertaken over the annual reporting period,	Annual Rehabilitation Report – 2022, Version 2.0, dated 1 May 2023.			Section 4 of the annual rehabilitation report provides a description of the surface disturbance and rehabilitation actions taken during the reporting period.	Complies	
		(b) a report demonstrating the progress made through the phases of rehabilitation provided for in the forward program applying to the reporting period,	Annual Rehabilitation Report – 2022, Version 2.0, dated 1 May 2023.			Section 5.2 of the annual rehabilitation report provides a report on rehabilitation progress against the rehabilitation objectives and completion criteria.	Complies	
		(c) a report demonstrating progress made towards the achievement of the following— (i) the objectives set out in the rehabilitation objectives statement, (ii) the criteria set out in the rehabilitation completion criteria statement, (iii) for large mines—the final land use as spatially depicted in the final landform and rehabilitation plan.	Annual Rehabilitation Report – 2022, Version 2.0, dated 1 May 2023.			Section 5.2 of the annual rehabilitation report provides a report on rehabilitation progress against the rehabilitation objectives and completion criteria.	Complies	
		(3) If a rehabilitation outcome document has not been approved by the Secretary, the holder of the mining lease must rely on a proposed version of the document.	Rehabilitation Management Plan Version 1, dated 28 July 2022.			The rehabilitation Outcome Document is contained within the Approved Rehabilitation Management Plan	Not Triggered	

Standard Mining Lease Terms (Applies from 2 July 2022)

Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations	
D3 C13	Rehabilitation Documents Forward program and annual rehabilitation report	(4) The holder of the mining lease must give the forward program and annual rehabilitation report to the Secretary.	<p>Email from the Resources Regulator to MTW (B Baxter) titled "Mount Thorley Warkworth Complex Forward Program submission FWP0001168", dated 1 May 2023, confirming receipt of the forward program.</p> <p>Email (titled "Extension Request for Submission of MTW Annual Rehabilitation report and Forward Program", dated 31 March 2023) from the Resources Regulator.</p> <p>Email from the Resources Regulator (b Walsh) to MTW (B Baxter) titled "MTW ARR Submission", dated 1 May 2023, confirming that the RR was experiencing IT issues that were impacting the recording of submission dates.</p>	<p>The Resources Regulator approved an extension to the date of submission of the Forward Program to 1 May 2023. The Annual Rehabilitation Report and the Forward Program were submitted via the Resources Regulator portal on 1 May 2023.</p> <p>Note: There were some IT issues with the system which meant the Annual Rehabilitation Report was confirmed as submitted on by email from RR on 22 May 2023.</p>		The forward program and annual rehabilitation report were submitted to the Resource Regulator on 1 May 2023.	Complies		
		(5) In this clause—annual reporting period means each period of 12 months commencing on—					Administrative Condition Only	Noted	
D3 C14	Rehabilitation Documents Amendment of rehabilitation outcome documents and forward program	(1) This clause applies to—							
		(a) a rehabilitation outcome document if the Secretary has approved it, and				Administrative Condition Only	Noted		
		(b) a forward program if it has been given to the Secretary.				Administrative Condition Only	Noted		
		(2) The holder of a mining lease must not amend a document to which this clause applies that relates to the mining lease unless—					The rehabilitation Outcome Document as presented in the Rehabilitation Management Plan has not been amended during this audit period.	Not Triggered	
		(a) the Secretary gives the holder a written direction to do so, or					The rehabilitation Outcome Document as presented in the Rehabilitation Management Plan has not been amended during this audit period.	Not Triggered	
		(b) the Secretary, on written application by the holder, gives a written approval of the amendment					The rehabilitation Outcome Document as presented in the Rehabilitation Management Plan has not been amended during this audit period.	Not Triggered	
		(3) The holder of the mining lease must amend the document in accordance with the Secretary's direction or approval.					The rehabilitation Outcome Document as presented in the Rehabilitation Management Plan has not been amended during this audit period.	Not Triggered	
(4) Nothing in this clause prevents the holder of a mining lease preparing a draft amendment for submission to the Secretary for approval						Noted			

Standard Mining Lease Terms (Applies from 2 July 2022)

Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
D3-15	Rehabilitation Documents Times at which documents must be prepared and given	(1) The holder of a mining lease must do the following before the end of the initial period— a) prepare a rehabilitation management plan, and	Rehabilitation Management Plan Version 1, dated 28 July 2022.			The Rehabilitation Management Plan has been reviewed and approved by the Resources Regulator. The final plan has been approved by DPE.	Complies	
		b) prepare rehabilitation outcome documents and give them, other than the rehabilitation completion criteria statement, to the Secretary for approval, and	Rehabilitation Management Plan Version 1, dated 28 July 2022.			The Rehabilitation Management Plan has been reviewed and approved by the Resources Regulator. The final plan has been approved by DPE.	Complies	
		c) prepare a forward program and give it to the Secretary.	Email for the Resources Regulator confirming receipt of the Annual Rehabilitation Report and Forward Plan on 1 May 2023.	The Resources Regulator approved an extension to the date of submission of the Forward Program to 1 May 2023. The Annual Rehabilitation Report and the Forward Program were submitted via the Resources Regulator portal on 1 May 2023.		The forward program and annual rehabilitation report were submitted to the Resource Regulator on 1 May 2023.	Complies	
		(2) The holder of the mining lease must prepare a forward program and annual rehabilitation report and give them to the Secretary before— a) 60 days after the last day of each annual reporting period, commencing with the annual reporting period in which the forward program was given to Secretary under subclause (1)(c), or	Email from the Resources Regulator to MTW (B Baxter) titled “Mount Thorley Warkworth Complex Forward Program submission FWP0001168”, dated 1 May 2023, confirming receipt of the forward program. Email (titled “Extension Request for Submission of MTW Annual Rehabilitation report and Forward Program”, dated 31 March 2023) from the Resources Regulator. Email from the Resources Regulator (b Walsh) to MTW (B Baxter) titled “MTW ARR Submission”, dated 1 May 2023, confirming that the RR was experiencing IT issues that were impacting the recording of submission dates.			Refer to Clause 2(b) below.	Not Triggered	
		b) a later date approved by the Secretary.	Email from the Resource Regulator to MTW (titled “Extension Request for Submission of MTW Annual Rehabilitation report and Forward Program”, dated 31 March 2023).			The Resource Regulator approved an extension to the reporting time to 1 May 2023. The forward program and annual rehabilitation report were submitted to the RR on 1 May 2023.	Complies	
		(3) A rehabilitation completion criteria statement relating to completion of rehabilitation during a period covered by a forward program must be given to the Secretary for approval when the forward program is required to be given to the Secretary.	Annual Rehabilitation Report – 2022, Version 2.0, dated 1 May 2023.	Environment and Community Manager – no areas of rehabilitation have been completed on the MTW complex.		No areas of rehabilitation have been completed on the MTW complex.	Not Triggered	

Standard Mining Lease Terms (Applies from 2 July 2022)

Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
D3-15	Rehabilitation Documents Times at which documents must be prepared and given	(4) The holder of the mining lease must prepare updated rehabilitation outcome documents for the mining lease and give them to the Secretary for approval before— (a) 60 days after a development consent is modified following an application referred to in clause 20(1)(b), or				No modifications to the Approvals have been approved since the issue of the current rehabilitation outcome documents.	Not Triggered	
		(b) a later date approved by the Secretary				No modifications to the Approvals have been approved since the issue of the current rehabilitation outcome documents.	Not Triggered	
		(5) A rehabilitation completion criteria statement is not required to be given to the Secretary under subclause (4) unless a rehabilitation completion criteria statement has already been given to the Secretary under subclause (3).				Administrative Statement only	Noted	
		(6) The Secretary may, by written notice, direct the holder of a mining lease to prepare, or give to the Secretary, a document required to be prepared under this Division at a time other than that specified in this clause.		Environment and Community Manager – no notices have been issued by the Resource Regulator regarding the preparation of the rehabilitation outcome documents during this audit period.		No notices have been issued by the Resource Regulator regarding the preparation of the rehabilitation outcome documents during this audit period.	Not Triggered	
		(7) The holder of the mining lease must comply with the direction.		Environment and Community Manager – no notices have been issued by the Resource Regulator regarding the preparation of the rehabilitation outcome documents during this audit period.		No notices have been issued by the Resource Regulator regarding the preparation of the rehabilitation outcome documents during this audit period.	Not Triggered	
		(8) In this clause—initial period means the period commencing when the mining lease is granted and ending— (a) 30 days, or other period approved by the Secretary, after this Division first applies to the mining lease, or				Administrative Condition Only	Noted	
		(b) if this Division applies to the mining lease because of an increase in the required security deposit— (i) when the surface of the mining area is disturbed by activities under the mining lease, or (ii) at a later date approved by the Secretary.				Administrative Condition Only	Noted	

Standard Mining Lease Terms (Applies from 2 July 2022)

Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
D3-16	Rehabilitation Documents Certain documents to be publicly available	(1) This clause applies to the following documents— a) a rehabilitation management plan, b) a forward program, c) an annual rehabilitation report				Administrative Condition Only	Noted	
		(2) The holder of a mining lease must make a document to which this clause applies publicly available by— (a) publishing it on its website in a prominent position, or	MTW Website			The Rehabilitation Outcome documents (including the Rehabilitation Management Plan) have been uploaded to the MTW website.	Complies	
		(b) if the holder does not have a website— providing a copy of it to a person— (i) on the written request of a person, and (ii) without charge, and (iii) within 14 days after the request is received.	MTW Website			The Rehabilitation Outcome documents (including the Rehabilitation Management Plan) have been uploaded to the MTW website.	Not Triggered	
		(3) If a document is published on the website of the holder of the mining lease, the holder must ensure that it is published— (a) for a rehabilitation management plan—within 14 days after it is prepared or amended, or	MTW Website			The Rehabilitation Outcome documents (including the Rehabilitation Management Plan) have been uploaded to the MTW website.	Complies	
		(b) for a forward program or an annual rehabilitation report— within 14 days after it is given to the Secretary or amended,				The Rehabilitation Outcome documents (including the Rehabilitation Management Plan) have been uploaded to the MTW website.	Complies	
		(4) Personal information within the meaning of the Privacy and Personal Information Protection Act 1998 is not required to be included in a document made available to a person under this clause.				Administrative Condition Only	Noted	
D4-17	Records, Reporting and Notification Records demonstrating compliance	The holder of a mining lease must create and maintain records of all actions taken that demonstrate compliance with each of the conditions set out in this Part. Note— The Act, sections 163D and 163E provide for the form in which records must be kept and the period for which they must be retained.				All records requested by the Auditor were made available during this IEA.	Complies	

Standard Mining Lease Terms (Applies from 2 July 2022)

Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
D4-C18	Records, Reporting and Notification Report on non-compliance	(1) The holder of a mining lease must provide the Minister with a written report detailing any non-compliance with- (a) a condition of the mining lease, or		Environment and Community Manager – no non-compliances against the standard conditions for the mining leases have occurred.		No non-compliances against the Standard Mining Lease Conditions (since 2 July 2022 when these conditions came into force) have been identified during this IEA.	Note Triggered	
		(b) a requirement of the Act or this Regulation relating to activities under the mining lease.		Environment and Community Manager – no non-compliances against the standard conditions for the mining leases have occurred.		No non-compliances against the Standard Mining Lease Conditions (since 2 July 2022 when these conditions came into force) have been identified during this IEA.	Note Triggered	
		(2) The holder of the mining lease must provide the report within 7 days after becoming aware of the non-compliance		Environment and Community Manager – no non-compliances against the standard conditions for the mining leases have occurred.		No non-compliances against the Standard Mining Lease Conditions (since 2 July 2022 when these conditions came into force) have been identified during this IEA.	Note Triggered	
		(3) The holder of the mining lease must ensure the report— a) identifies the condition of the mining lease, or the requirement of the Act or this Regulation, to which the non-compliance relates, and		Environment and Community Manager – no non-compliances against the standard conditions for the mining leases have occurred.		No non-compliances against the Standard Mining Lease Conditions (since 2 July 2022 when these conditions came into force) have been identified during this IEA.	Note Triggered	
		b) describes the non-compliance and specifies the date or dates on which, or the period during which, the non-compliance occurred, and		Environment and Community Manager – no non-compliances against the standard conditions for the mining leases have occurred.		No non-compliances against the Standard Mining Lease Conditions (since 2 July 2022 when these conditions came into force) have been identified during this IEA.	Note Triggered	
		c) describes the causes or likely causes of the non-compliance, and		Environment and Community Manager – no non-compliances against the standard conditions for the mining leases have occurred.		No non-compliances against the Standard Mining Lease Conditions (since 2 July 2022 when these conditions came into force) have been identified during this IEA.	Note Triggered	
		d) describes the action that has been taken, or will be taken, to mitigate the effects, and to prevent any recurrence, of the non-compliance.		Environment and Community Manager – no non-compliances against the standard conditions for the mining leases have occurred.		No non-compliances against the Standard Mining Lease Conditions (since 2 July 2022 when these conditions came into force) have been identified during this IEA.	Note Triggered	

Standard Mining Lease Terms (Applies from 2 July 2022)

Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
D4-C19	Records, Reporting and Notification Nominated contact person	(1) The holder of a mining lease must nominate a natural person to be the contact person with whom the Secretary can communicate in relation to the mining lease for the purposes of the Act. Note — The Act, section 383 sets out the ways in which notices or other documents may be issued or given to, or served on, a person for the purposes of the Act.	Letter from MTW (D Moul / M Jacobs) to the NRAR titled “Mt Thorley Warkworth Complex Nominated Contact”, dated 21 December 2022.			MTW has nominated contact persons for each mining lease associated with the Mr Thorley Warkworth Complex.	Complies	
		(2) The holder of the mining lease must give written notice to the Secretary of— (a) the full name and contact details of the nominated person—within 28 days after the date on which the standard conditions apply to the mining lease under clause 31A of this Regulation, and	Email from NRAR to MTW (K Adamthwaite) titled “(Nominated Contact Person - Mount Thorley Warkworth Complex)”, dated 18 July 2022.			MTW advised the NRAR of the nominated contact persons details with the 28-day time frame required by this condition.	Complies	
		(b) any change in nomination or in the nominated person’s contact details—within 28 days after the change occurs.				Not triggered in this audit period.	Not Triggered	
		(3) The holder of the mining lease must ensure that the contact details for the nominated person include the person’s phone number and postal and email addresses.	Letter from MTW (D Moul / M Jacobs) to the NRAR titled “Mt Thorley Warkworth Complex Nominated Contact”, dated 21 December 2022.			Contact details for the nominated persons has been provided to the NRAR.	Complies	
D5-20	Applications relating to development consent Additional requirements— application for or to modify development consent	(1) The holder of a mining lease must give written notice to the Secretary within 10 days after— (a) making an application for development consent that relates to the mining area, or	Planning Approvals: • SSD 6464; and • SSD 6465.			Both the Mt Thorley and Warkworth projects have been approved as State Significant Developments.	Not Triggered	
		(b) making an application for modification of a development consent— (i) under the <i>Environmental Planning and Assessment Act 1979</i> , section 4.55(2), and (ii) that proposes to modify a condition of the consent that relates to rehabilitation of the mining area in a way that may affect an obligation under the mining lease relating to rehabilitation of the mining area.	Planning Approvals: • SSD 6464; and • SSD 6465.			Both the Mt Thorley and Warkworth projects have been approved as State Significant Developments.	Not Triggered	
		(2) This clause does not apply if the development is State significant development.	Planning Approvals: • SSD 6464; and • SSD 6465.			Administrative Condition Only.	Noted	

Compliance Registers Warkworth Mining Leases

Cond	Detail	Evidence Reference	CCL 753
1	Optimise Coal Extraction	SSD 6464 / S2 C6	Complies
2	Operation in accordance with MOP	SSD 6464 / S3 C57	Non-compliance
3	Prepare and issue AEMR	SSD 6464 / S5 C4	Complies
14	Shafts & Adit Safety	Incident Register	Complies
15	Dumps - Comply Inspector Directions	Section 7.7.3	Complies
16	Comply with directions to spray coal dumps	Section 7.7.3	Not Triggered
17	Minimise Dust	SSD 6464 / S3 C19	Non-compliance
18	No interference with fences	Incident Register	Complies
19	No damage to public infrastructure	SSD 6464 / S2 C12	Not Triggered
20	Undertake dilapidation surveys if directed	Section 7.7.3	Not Triggered
21	Rehabilitate land as directed.	Section 7.7.3	Not Triggered
22	Remove structures at closure		Not Triggered
23	Rehabilitate land as directed.	Section 7.7.3	Not Triggered
24	Prevent fire	SSD 6464 / S3 C54	Complies
25	Environmental Protection	SSD 6464 / S3 C24	Non-compliance
26	Monitor blasting	SSD 6464 / S3 C8	Complies
27	Minimise disturbance to flora and fauna	SSD 6464 / S3 C36	Complies
29	Establish arboreal screen	SSD 6464 / S3 C36	Complies
30	Minimise erosion	SSD 6464 / S3 C26	Complies
31	Pay Council for any road damage	SSD 6464 / S2 C12	Not Triggered
32	If required realign roads	SSD 6464 / S3 C47 - 50	Complies
38	All access to travelling stock		Noted
39	All access to travelling stock		Noted
41	No not interfere with power lines etc	SSD 6464 / S2 C12	Not Triggered
42	Consent from Energy Australia	SSD 6464 / S2 C13	Not Triggered
44	Labour / expenditure	SSD 6464 / S2 C6	Complies
45	Provide info if requested		Noted
46	Service of notices		Noted
47	Cooperate with inspectors		Noted
48	Indemnities		Noted
49	Indemnify the Crown		Noted
50	Prospecting		Not Triggered
51	Security Deposit	Previous IEA	Complies
54	Royalty rate		Noted
55	Fix damage to power lines	SSD 6464 / S2 C12	Not Triggered
56	Construct and maintain dams to satisfy Inspector		Noted

Cond.	Detail	Evidence Reference	ML 1412
1	Optimise Coal Extraction	SSD 6464 / S2 C6	Complies
2	No underground without approval		Not Triggered
3	No open cut without approval	SSD6464	Complies
15	Dumps and Prep Plant - comply with directions	Section 7.7.3	Not Triggered
17	Minimise Dust	SSD 6464 / S3 C19	Non-compliance
18	No interference with fences	Incident Register	Complies
19	No damage to public infrastructure	SSD 6464 / S2 C12	Not Triggered
21	Prepare and issue AEMR	SSD 6464 / S5 C4	Complies
22	rehabilitate land as directed.		
23	Remove structures at closure		Not Triggered
24	rehabilitate land as directed.	Section 7.7.3	Not Triggered
25	Prevent fire	SSD 6464 / S3 C54	Complies
26	Monitor blasting	SSD 6464 / S3 C8	Complies
27	Environmental Protection	SSD 6464 / S3 C24	Non-compliance
28	Minimise disturbance to flora and fauna	SSD 6464 / S3 C36	Complies
29	No felling trees except with landowner approval		Noted
30	Establish arboreal screen	SSD 6464 / S3 C36	Complies
31	Minimise erosion	SSD 6464 / S3 C26	Complies
42	No not interfere with power lines etc	SSD 6464 / S2 C12	Not Triggered
43	Consent from Ausgrid	SSD 6464 / S2 C13	Not Triggered
44	Protect Indigenous Heritage	SSD 6464 / S3 C43	Complies
56	Roads - realign Putty Road	SSD 6464 / S3 C47 - 50	Complies
45	Labour / expenditure	SSD 6464 / S2 C6	Complies
46	Provide info if requested		Noted
47	Service of notices		Noted
48	Cooperate with inspectors		Noted
49	Indemnities		Noted
50	Indemnify the Crown		Noted
51	Prospecting		Not Triggered
52	Security Deposit	Previous IEA	Complies
55	Royalty rate		Noted

Cond.	Detail	Evidence Reference	ML 1590
1	Land holder notices	Previous IEA Reports	Complies
2	Operation in accordance with MOP	SSD 6464 / S3 C57	Non-compliance
3	Prepare and issue AEMR	SSD 6464 / S5 C4	Complies
4	Subsidence Management	No Underground Works	Not Triggered
5	Labour / expenditure	SSD 6464 / S2 C6	Complies
6	Inspector can stop works		Noted
7	Exploration Reports		Noted
8	Use of reports by Minister		Noted
9	Confidentiality		Noted
10	Use of reports by Minister		Noted
11	Blasting	SSD 6464 / S3 C8	Complies
12	Mine safely	Incident Register	Complies
13	Rehab site in accordance with MOP	SSD 6464 / S3 C57	Non-compliance
14	Rehab site in accordance with Directions	Section 7.7.3	Not Triggered
15	Exploratory Drilling - notify 28 days prior		Noted
16	Prevent Soil Erosion	SSD 6464 / S3 C26	Complies
17	No not interfere with power lines etc	SSD 6464 / S2 C12	Not Triggered
18	No not interfere with fences etc	Incident Register	Complies
19	No not interfere with Roads etc	SSD 6464 / S2 C12	Not Triggered
20	Keep access tracks to a minimum		Noted
21	No felling trees except with landowner approval		Noted
22	Optimise Coal Extraction	SSD 6464 / S2 C6	Complies
23	Indemnities		Noted
24	Env Incident Reporting	Incident Register	Complies
25	Security Deposit		Noted

Cond.	Detail	Evidence Reference	ML 1751
1	Land holder notices	Previous IEA Reports	Complies
2	Rehabilitate to the Satisfaction of the Minister		Noted
3	MOP and Annual Rehab Report	SSD 6464 / S3 C57	Non-compliance
4	Compliance Report	SSD 6464 / S5 C4	Complies
5	Incident Reporting	Incident Register	Complies
6	Extraction Plan	No underground works	Not Triggered
7	Resource Recovery - optimise	SSD 6464 / S2 C6	Complies
8	Group Security		Noted
9	Cooperation Agreement with overlapping leases		Noted

Compliance Registers Mt Thorley Mining Leases

Cond.	Detail	Evidence Reference	CL 219
1	Optimise Coal Extraction	SSD 6465 / S2 C6	Complies
2	Operation in accordance with MOP	SSD 6465 / S3 C35	Non-compliance
3	Prepare and issue AEMR	SSD 6465 / S5 C4	Complies
9	Underground Workings	No underground works	Not Triggered
14	Shafts & Adit Safety	Incident Register	Complies
15	Dumps - Comply Inspector Directions	Section 7.7.3	Complies
16	Comply with directions to spray coal dumps	Section 7.7.3	Not Triggered
17	Minimise Dust	SSD 6465 / S3 C17	Non-compliance
18	No interference with fences	Incident Register	Complies
19	No damage to public infrastructure	SSD 6465 / S2 C12	Not Triggered
20	Undertake dilapidation surveys if directed	Section 7.7.3	Not Triggered
21	Rehabilitate land as directed.	Section 7.7.3	Not Triggered
22	Remove structures at closure		Not Triggered
23	Rehabilitate land as directed.	Section 7.7.3	Not Triggered
24	Prevent fire	SSD 6465 / S3 C32	Complies
25	Environmental Protection	SSD 6465 / S3 C22	Non-compliance
26	Monitor blasting	SSD 6465 / S3 C8	Complies
27	Minimise disturbance to flora and fauna	SSD 6465 / S3 C36	Complies
29	Establish arboreal screen	SSD 6465 / S3 C36	Complies
30	Minimise erosion	SSD 6465 / S3 C24	Complies
31	Pay Council for any road damage	SSD 6465 / S2 C12	Not Triggered
32	If required realign roads		Not Triggered
33	Do Not pollute the Hunter River	SSD 6465 / S3 C24	Complies
50	Prospecting		Noted
51	Security Deposit		Noted
54	Royalty rate		Noted
55	stay clear of Wollombi Creek	SSD 6465 / S3 C24	Complies

Cond.	Detail	Evidence Reference	ML 1752
2	Rehab to satisfy Minister		Noted
3	Operation in accordance with MOP	SSD 6465 / S3 C35	Complies
4	Annual Compliance Report	SSD 6465 / S5 C4	Complies
5	Env Incident Reporting	Incident Register	Complies
6	Extraction Plan	No underground works	Not Triggered

Audit Photographs

Appendix B



Photograph 1 - Warkworth Open Cut Mine



Photograph 2 - Water Cart



Photograph 3 - Weather Station



Photograph 4 - Sediment Basin



Photograph 5 - Stabilised Drain



Photograph 6 - Waste Storage Signage



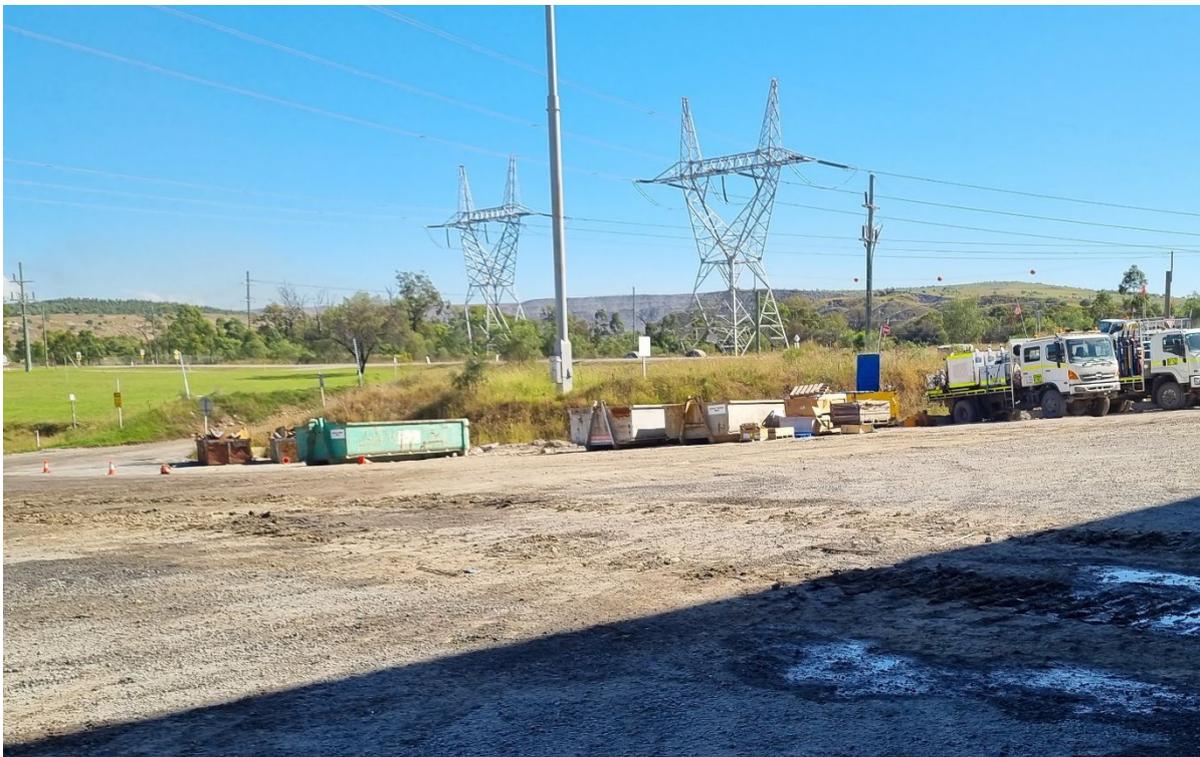
Photograph 7 - Mt Thorley Open Cut Pit



Photograph 8 - Effluent Irrigation Area



Photograph 9 - Self Bunded Fuel Tank and Generator (Warkworth)



Photograph 10 - Waste sorting and storage at Mt Thorley Maintenance Facility



Photograph 11 - Mt Thorley Heavy Plant Maintenance



Photograph 12 - Dam 1S signage

DPE Correspondence

Appendix C

Mr Gary Mulhearn
Environment & Community Manager
Yancoal Mt Thorley Warkworth
Wonnaruah Country

By email only: gary.mulhearn@yancoal.com.au

29/03/2023

Dear Mr Mulhearn

Warkworth Continuation - Auditor Endorsement Request (SSD-6464 and SSD-6465)

I refer to your request (SSD-6464-PA-73) for the Secretary's endorsement of suitably qualified persons to prepare the upcoming Independent Environment Audit (IEA) report for the Mount Thorley Warkworth (MTW) complex as required by Schedule 5 Condition 9 of SSD-6464 and SSD-6465 (the consents).

The Department of Planning and Environment (the department) has reviewed the nominations and information you have provided and is satisfied that these experts are suitably qualified and experienced.

Consequently, I can advise that the Planning Secretary approves the appointment of the proposed individuals to undertake the IEA. As such, in accordance with Schedule 5 Condition 9 of the consents, and the Independent Audit Post Approval Requirements, the Secretary has agreed to the following audit team:

- Mr Ken Holmes – Lead Auditor
- Mr Richard Peterson – Support Auditor
- Dr Gitanjali Katrak – Ecological/ Rehabilitation Specialist; and
- Mr Adam Bishop – Surface Water Specialist

Please ensure this correspondence is appended to the IEA Report.

The Independent Audit must be prepared, undertaken and finalised in accordance with the Independent Audit Post Approval Requirements. Failure to meet these requirements will require revision and resubmission.

Should you wish to discuss the matter further, please contact James Epstein, Senior Compliance Officer, on (02) 6575 3419 or email compliance@planning.nsw.gov.au

Yours sincerely



Heidi Watters
Team Leader Northern
Compliance

As nominee of the Planning Secretary

13 July 2023

Ms Heidi Watters
Team Leader Northern - Compliance
NSW Department of Planning and Environment
PO Box 3145
Singleton NSW, 2330

Dear Heidi,

Re: Mount Thorley Warkworth Complex (SSD-6464 and SSD-6465) – Independent Environmental Audit

The Mount Thorley Warkworth (MTW) complex comprises the Warkworth Continuation Project approved by development consent SSD-6464, and the Mount Thorley Continuation Project approved by development consent SSD-6465. Schedule 5, Conditions 9 and 10 of the consents require an Independent Environmental Audit (IEA) to be undertaken.

Reference is made to a previous submission by MTW on 13 June 2023 (Reference: SSD-6464-PA76) and subsequent DPE correspondence on 14 June 2023 which approved an extension to the date for submission of the IEA report by 14 July 2023. Subsequently, the audit documentation review by the audit team has progressed, however further audit information has been requested for various approval conditions, and this remains in progress.

Based on the progress with the audit to date, it is requested the Department consider an extension to the date of submission of the audit report to **4 August 2023**. This is considered to provide sufficient time for the audit team to complete a thorough review of additional audit evidence, and for review of the draft audit report and finalisation.

If you wish to discuss this matter further, please do not hesitate to contact me on (02) 6570 1734.

Yours faithfully,



Gary Mulhearn
Environment & Community Manager
Yancoal Mt Thorley Warkworth

E: gary.mulhearn@yancoal.com.au

Consultation Records

Appendix D

From: [James Epstein](#)
To: [Ken Holmes](#)
Cc: [Heidi Watters](#)
Subject: RE: Mount Thorley Warkworth Mine - 2023 Independent Environmental Audit - Consultation Request DPE
Date: Wednesday, 12 April 2023 7:48:55 AM
Attachments: [image001.png](#)

Hi Ken

Thank you for consulting with the department on the upcoming IEA of the Mt Thorley Warkworth Mine.

The department requests that the upcoming IEA pay particular focus to the following items:

- Implementation of the Blast Management Plan, including the completion of pre-blasting requirements and checklists;
- Implementation of the Noise Management Plan, including responses to alarms and complaints from real-time noise monitors; and
- Implementation of the Water Management Plan, specifically during heavy rainfall events

If you would like to discuss further I can be contacted on the details below.

Regards

James Epstein

Senior Compliance Officer

Development Assessment | Department of Planning and Environment

T 02 6575 3419 | M 0429 395 691 | E james.epstein@planning.nsw.gov.au

PO Box 3145, Singleton NSW 2333

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: Ken Holmes <Ken@baeckea.com.au>
Sent: Thursday, 6 April 2023 10:10 AM
To: Heidi Watters <Heidi.Watters@Planning.nsw.gov.au>; DPE PSVC Compliance Mailbox <compliance@planning.nsw.gov.au>
Subject: Mount Thorley Warkworth Mine - 2023 Independent Environmental Audit - Consultation Request DPE

Good Morning Heidi,

Barnett and May has been commissioned to undertake the 2023 Independent Environmental Audit (**IEA**) of the Mt Thorley Warkworth Mine (SSD 6464 and SSD 6465). The audit will commence in the last week in April 2023. The IEA will be undertaken accordance with Project Approval Conditions that requires:

Within 1 year of the commencement of development, and every 3 years thereafter, unless the Planning Secretary

directs otherwise, the Applicant must commission and pay the full cost of an Independent Environmental Audit

(audit) of the Development. This audit must:

(a) be conducted by a suitably qualified, experienced and independent team of experts (including and odour expert) whose appointment

has been endorsed by the Planning Secretary;

(b) include consultation with the relevant agencies;

(c) assess the environmental performance of the Development and assess whether it is complying with the

requirements in this consent, and any other relevant approvals, relevant EPL(s) or mining lease {including any

assessment, plan or program required under these approvals};

(d) include an assessment – undertaken by an independent expert whose appointment has been endorsed by the BCD – of progress towards implementation of the biodiversity off-set strategy, in particular the regeneration of Warkworth Sands Woodlands against the detailed performance and completion criteria under the Biodiversity management plan;

(e) review the adequacy of any approved strategy, plan or program required under the abovementioned

consents: and

(f) recommend measures or actions to improve the environmental performance of the Development and/or

any strategy, plan or program required under these consents.

The audit will be undertaken in accordance with DPIE's Independent Audit Post Approval Guidelines (May 2020).

The Approval requires that the Auditor consults with relevant agencies. I have been provided me with your contact details as a relevant regulator. I would therefore appreciate if you could provide me with any information, comments or concerns that the DPE may have regarding the environmental performance of the operation (over the past three years – the audit period) and details of any specific issues you suggest that the Auditor considers during the audit.

Please do not hesitate to contact me if you require any additional information.

Thanks and Regards,

Ken Holmes
Lead Auditor

Principal Environmental Consultant
Director

Barnett & May

P +61 [0]438 046 261

E ken@baeckea.com.au

A PO Box 365 Belrose NSW 2085

From: [Corey O'Driscoll](#)
To: [Ken Holmes](#)
Subject: RE: Mount Thorley Warkworth Mine - 2023 Independent Environmental Audit - Consultation Request Heritage NSW
Date: Tuesday, 18 April 2023 5:00:32 PM
Attachments: [image001.png](#)

Hi Ken,

Thank you for getting back to me. I have had a look through our files and spoken to my team members, there is currently no concerns that we are aware of regarding the Mine's management of aboriginal cultural heritage over the past three years. However, I would recommend contacting Department of Planning and Environment's Compliance Team at info@environment.nsw.gov.au as they may be aware of any non-compliance.

Kind regards,
Corey.

Corey O'Driscoll

Senior Assessments Officer (Archaeologist)
Heritage NSW, Environment and Heritage Group
Department of Planning and Environment

Level 3, 11 Farrer Place, Queanbeyan NSW 2620

T: 02 62297079 | Corey.ODriscoll@environment.nsw.gov.au



I acknowledge and respect the traditional custodians and ancestors of the lands I work across.

Please note my work days are Monday to Wednesday. For anything urgent, please contact Nicole Davis (Nicole.davis@environment.nsw.gov.au). Otherwise, I will respond to your email as soon as possible when I am back in the office.

From: Ken Holmes <Ken@baeckea.com.au>
Sent: Thursday, 13 April 2023 8:45 AM
To: Corey O'Driscoll <Corey.ODriscoll@environment.nsw.gov.au>
Subject: RE: Mount Thorley Warkworth Mine - 2023 Independent Environmental Audit - Consultation Request Heritage NSW

Good Morning Corey,

Thanks for your prompt response. In essence, for this Independent Audit, I am seeking inputs on Aboriginal Cultural Heritage, for example:

- Any concerns the Department has relating to the Mine's management of aboriginal cultural heritage over the past three years;
- Any non-compliances (actual or potential) against the relevant heritage legislation;
- Issues related to the implementation of heritage management plans by the proponent.

Please call me if you need any further information.

Thanks,

Ken Holmes
Principal Environmental Consultant
Director

Barnett & May

P +61 (0)438 046 261

E ken@baeckea.com.au

A PO Box 365 Belrose NSW 2085

From: Corey O'Driscoll <Corey.ODriscoll@environment.nsw.gov.au>

Sent: Wednesday, April 12, 2023 3:53 PM

To: Ken Holmes <Ken@baeckea.com.au>

Subject: RE: Mount Thorley Warkworth Mine - 2023 Independent Environmental Audit - Consultation Request Heritage NSW

Dear Ken,

Thank you for getting into contact with Heritage NSW. As Nicole Davis is currently on leave, I have been asked to contact you regarding the Mount Thorley Warkworth Mine Audit.

I see from your request that you would like any information, comments or concerns on the environmental performance of the operation. Can you please provide additional context on the types of information you are concerned with and if this relates only to Aboriginal Cultural Heritage or includes Environmental Heritage. Nicole Davis and myself are within the Aboriginal Cultural Heritage regulatory assessments team and do not necessarily deal with compliance with project approvals nor Environmental Heritage, however I will endeavour to provide the information you require. For concerns on the compliance with conditions of consent and other approvals, I recommend that you contact the Department of Planning and Environment's Compliance Team at info@environment.nsw.gov.au

Please do not hesitate to contact me via email or phone if wish to discuss the project further.

Kind regards,
Corey.

Corey O'Driscoll

Senior Assessments Officer (Archaeologist)
Heritage NSW, Environment and Heritage Group

Department of Planning and Environment

Level 3, 11 Farrer Place, Queanbeyan NSW 2620

T: 02 62297079 | Corey.ODriscoll@environment.nsw.gov.au



I acknowledge and respect the traditional custodians and ancestors of the lands I work across.

Please note my work days are Monday to Wednesday. For anything urgent, please contact Nicole Davis (Nicole.davis@environment.nsw.gov.au). Otherwise, I will respond to your email as soon as possible when I am back in the office.

From: Ken Holmes <Ken@baeckea.com.au>

Sent: Thursday, 6 April 2023 11:55 AM

To: Nicole Davis <Nicole.Davis@environment.nsw.gov.au>

Subject: Mount Thorley Warkworth Mine - 2023 Independent Environmental Audit - Consultation Request Heritage NSW

Good Morning Nicole,

Barnett and May has been commissioned to undertake the 2023 Independent Environmental Audit (**IEA**) of the Mt Thorley Warkworth Mine (SSD 6464 and SSD 6465). The audit will commence in the last week in April 2023. The IEA will be undertaken accordance with Project Approval Conditions that requires:

Within 1 year of the commencement of development, and every 3 years thereafter, unless the Planning Secretary directs otherwise, the Applicant must commission and pay the full cost of an Independent Environmental Audit (audit) of the Development. This audit must:

- (a) be conducted by a suitably qualified, experienced and independent team of experts (including and odour expert) whose appointment has been endorsed by the Planning Secretary;*
- (b) include consultation with the relevant agencies;*
- (c) assess the environmental performance of the Development and assess whether it is complying with the requirements in this consent, and any other relevant approvals, relevant EPL(s) or mining lease {including any assessment, plan or program required under these approvals};*
- (d) include an assessment – undertaken by an independent expert whose appointment has been endorsed by the BCD – of progress towards implementation of the biodiversity off-set strategy, in particular the regeneration of Warkworth Sands Woodlands against the detailed performance and completion criteria under the Biodiversity management plan;*
- (e) review the adequacy of any approved strategy, plan or program required under the abovementioned consents; and*
- (f) recommend measures or actions to improve the environmental performance of the Development and/or any strategy, plan or program required under these consents.*

The audit will be undertaken in accordance with DPIE's Independent Audit Post Approval Guidelines (May 2020).

The Approval requires that the Auditor consults with relevant agencies. I have been provided me with your contact details as a relevant regulator. I would therefore appreciate if you could

provide me with any information, comments or concerns that the Heritage NSW may have regarding the environmental performance of the operation (over the past three years – the audit period) and details of any specific issues you suggest that the Auditor considers during the audit.

Please do not hesitate to contact me if you require any additional information.

Thanks and Regards,

Ken Holmes
Lead Auditor

Principal Environmental Consultant
Director

Barnett & May

P +61 [0]438 046 261

E ken@baeckea.com.au

A PO Box 365 Belrose NSW 2085

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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, Energy and Science.

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AREQ0039177

Mr Ken Holmes
Barnett & May
PO Box 365
Belrose NSW 2085
By email: ken@baeckea.com.au

Dear Mr Holmes,

Subject: Mount Thorley Warkworth Mine – Independent Environmental Audit

Thank you for your email dated 6 April 2023 requesting consultation on the independent environmental audit to be undertaken of the Mount Thorley Warkworth Mine which is covered by the following mining leases.

- CCL753 (1973)
- CL219 (1973)
- ML1412 (1992)
- ML1590 (1992)
- ML1751 (1992)
- ML1752 (1992)
- ML1828 (1992)

The independent environmental audit is required to assess compliance against the relevant environmental management conditions of the mining leases up to 1 July 2022, including implementation of the mining operations plan for the site.

From 2 July 2022, the independent environmental audit should provide an assessment of compliance with the requirements of Schedule 8A Standard conditions of mining leases, Part 2 Standard conditions, as set out in the Mining Regulation 2016. It is noted that the 7 mining leases that comprise Mount Thorley Warkworth Mine have been approved by the Regulator to be treated as a single lease for the purposes of Part 2 of Schedule 8A.

The audit should note observations where rehabilitation procedures, practices and outcomes represent best industry practice.

It would be appreciated if a copy of the final audit report could be sent to the Regulator at nswresourcesregulator@service-now.com upon completion of the audit.

Yours sincerely

Jenny Ehmsen
Principal Compliance Auditor
12 April 2023



6 April 2023

Our Ref: M1-3

Ken Holmes

Lead Auditor

Barnett and May

P O BOX 365

Belrose NSW 2085

Dear Mr Holmes

RE: Mount Thorley Warkworth Mine – 2023 Independent Environmental Audit – Request for Input – Singleton Council

I refer to your email request dated 6 April 2023 requesting comment from Council on the Mount Thorley Warkworth Independent Environmental Audit. This letter forms Council's feedback in relation to that request.

The conditions of approval for SSD 6464 and SSD 6465, require consultation with council on a number of matters, including, but not limited to:

- Planning Agreement
- Biodiversity offsetting and associated subdivision of land
- Historic Heritage Management Plan
- Transport
- Waste (Onsite Sewerage Management System)
- Rehabilitation Management Plan
- Mine Closure Plan
- Community Consultative Committee

Additionally, the conditions of approval require the Applicant to establish a community consultative committee with representation from Council and provide a copy of the Audit Report to Council.

Council would expect that the audit will include evidence to support the compliance status of these conditions of approval, and of interest to council, evidence to support the following:

- The extent to which development contributions made under either a Planning Agreement or Contributions Plan have been made;
- The extent of consultation with council on transport conditions, particularly in relation to transfer of ownership and subdivision to support completion of the works;
- Mine closure planning to achieve the objectives set out in Table 13 of the consents;
- In particular, the extent to which the applicant intends to *minimise adverse socio-economic impacts associated with mine closure*;

- Compliance with requirements of any OSSM approval; and
- Whether the various rehabilitation management and closure planning objectives/ plans/ strategies required under the various consents align to local, regional and State strategic land use planning documents, including whether these documents incorporate final land use outcomes consistent with these strategic land use planning documents.

I would like to thank you for the opportunity to provide comment on scope for the Mount Thorley Warkworth Independent Environmental Audit. Should you have any questions or comments, please contact Mary-Anne Crawford, Manager Development and Environmental Services on 02 6578 7290.

Yours faithfully



Mary-Anne Crawford
Manager Development and Environmental Services

From: [colin.gellatly](#)
To: [Ken Holmes](#)
Cc: [Gary Mulhearn](#)
Subject: Comments for audit
Date: Wednesday, 26 July 2023 10:55:34 AM

The MTW CCC operated throughout the audit period, meeting on a quarterly basis. At the time of the last meeting during the audit period (Q1 2023), the committee comprised five community members, one stakeholder representative, one council representative and the company representatives. During the challenges of COVID, the company facilitated the meetings to occur via teleconference to permit continuation of consultation.

Some of the key issues discussed or raised during the reporting period included:

Blast vibration and overpressure and road closure notification systems

Blast times, road closures and restricted speed zones

Lighting and Visual Amenity

General operational and environmental performance

Operational disturbance vs. rehabilitation performance

Offset properties, Warkworth Sands Woodlands and success rate of plantings

Modification applications to the Warkworth Continuation Project

Exploration activity related to potential future underground mining

Air quality and dust management

Voluntary Planning Agreement with Singleton Council

Company communications with broader community

Aboriginal Cultural Heritage and Historic Heritage management

Community Support Programs.

There were actions raised during the course of CCC meetings, relating to the above and other issues, which were responded to by the company and documented in the relevant meeting minutes.

The company facilitated site tour of operations during the audit period, which was attended by some members of the CCC. Representatives from the Department of Planning and Environment were invited and attended a meeting in Q4 2022 and directly answered queries from CCC members. Singleton Council representatives attended the Q1 2021 meeting to provide an update on the Voluntary Planning Agreement.

In my view as Chairperson, the MTW CCC is operating effectively and as intended by the development consents, and in general accordance with the CCC guidelines. It is anticipated that

similar key issues to those discussed during the audit period will continue to be the focus of the MTW CCC in future years.

Lead Auditor CV

Appendix E

KEN HOLMES

Senior Principal Environmental Consultant



Contact

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Qualifications & professional affiliations

- Bachelor of Science (Industrial Chemistry)
- Master of Applied Science (Waste Management)
- Master of Business Administration (MBA)
- Accredited Lead Environmental Auditor (Exemplar Global #: 14065)

Ken Holmes is an acknowledged industry leader in environmental management, impact assessment and project approvals. His career spans over 30 years and includes experience across Australia, Africa, Europe and South-east Asia.

Ken's extensive Environmental Audit, Infrastructure Planning and Approvals experience includes that preparation of environmental impact statements for major projects, pre-construction approvals, and operations environmental management experience.

He has led large scale projects on major road, rail, renewable energy, mining and water infrastructure projects across Australia. The projects presented below are a sample of the range and complexity of projects that Ken has delivered.

Project experience

Environmental Auditing (Audits completed in the recent years)

Mt Thorley / Warkworth Mine IEA (2023)- Ken led the independent environmental audit of environmental compliance audit of the this large mining complex located in the Hunter Valley, NSW. The conditions of approval for the mine requires a three-yearly independent environmental audit of compliance against:

- DP&E Conditions of Approval / Development Approvals;
- Commonwealth Approvals;
- Water Licences;
- Environment Protection Licences;
- Mining Leases;

The independent environmental audit was undertaken in accordance with AS/NZS ISO 19011:2014 and the Department of Planning and NSW EPA audit guidelines.

In addition to his role as lead auditor managing a multidisciplinary team, Ken covered the role as technical expert in air quality and noise management.

Hunter Power Project (Construction Phase IEA 2022 - 2025)- Ken has been commissioned to undertake the construction phase independent environmental audits on the Hunter Power Project. The Hunter Power Project is the construction of a new gas fired power station located in the Hunter Valley in NSW. The conditions of approval for the mine requires a three-yearly independent environmental audit of compliance against:

- DP&E Conditions of Approval / Development Approvals;
- Commonwealth Approvals;
- Environment Protection Licence;

The independent environmental audit are being undertaken undertaken in accordance with AS/NZS ISO 19011:2014 and the Department of Planning and NSW EPA audit guidelines.

As auditor, Ken's role covers all technical areas including construction management, waste, greenhouse gas, surface water management, air quality and noise management.

Hera Gold Mine (2019 and 2023)- Ken led the independent environmental audits for the environmental compliance audit of the Hera Gold Mine in western NSW. The conditions of approval for the mine requires a three-yearly independent environmental audit of compliance against:

- DP&E Conditions of Approval / Development Approvals;
- Commonwealth Approvals;
- Water Licences;
- Environment Protection Licences;
- Mining Leases; and the
- EIS (Statement of Commitments).

The independent environmental audit was undertaken in accordance with AS/NZS ISO 19011:2014 and the Department of Planning and NSW EPA audit guidelines.

In addition to his role as lead auditor managing a multidisciplinary team, Ken covered the role as technical expert in surface water management, air quality and noise management.

Bingo Industries Eastern Creek Resource Recovery Facility and Landfill (2022) - Ken led the environmental compliance audit of Bingo's Resource Recovery Facility and Landfill located in western Sydney. The conditions of project's Planning Approval requires a three-yearly independent environmental audit of compliance against:

- DP&E (NSW) Conditions of Approval / Development Approvals;
- Environment Protection Licence.

The Audit also included an odour audit and surface water audits undertaken by specialists within the audit team.

The independent environmental audit was undertaken in accordance with AS/NZS ISO 19011:2014 and the Department of Planning and NSW EPA audit guidelines and the EPBC element of the audit against the DAWE Audit Guidelines.

In addition to his role as lead auditor managing a multidisciplinary team, Ken covered the role as technical expert in air quality and noise management.

McArthur River Mine (Northern Territory) (2022) - Ken is currently leading the environmental compliance audit of McArthur River Mine in the Cape of Carpentaria, NT. EPBC Approval requires an annual independent environmental audit of compliance against that Approval.

The independent environmental audit is being undertaken in accordance with AS/NZS ISO 19011:2014 and the DAWE Audit Guidelines.

Moolarben Coal Mine (2022) - Ken led the environmental compliance audit of Moolarben Coal Mine located near Mudgee in Western NSW. The conditions of project's Planning Approval requires a three-yearly independent environmental audit of compliance against:

- EPBC Approval
- DP&E (NSW) Conditions of Approval / Development Approvals;
- Water Licences;
- Environment Protection Licence; and all
- Mining Leases.

The independent environmental audit was undertaken in accordance with AS/NZS ISO 19011:2014 and the Department of Planning and NSW EPA audit guidelines and the EPBC element of the audit against the DAWE Audit Guidelines.

In addition to his role as lead auditor managing a multidisciplinary team, Ken covered the role as technical expert in surface water management, air quality and noise management.

Bingo Industries Mortdale Resource Recovery Facility (2022) - Ken undertook the environmental compliance audit of waste recycling plant and transfer station located in Mortdale, NSW. The conditions of project's Planning Approval requires a three-yearly independent environmental audit of compliance against:

- DP&E (NSW) Conditions of Approval / Development Approvals;
- Environment Protection Licence.

The independent environmental audit was undertaken in accordance with AS/NZS ISO 19011:2014 and the Department of Planning and NSW EPA audit guidelines and the EPBC element of the audit against the DAWE Audit Guidelines.

Martin Place Over Station Development (2020 – ongoing series of annual independent audits to 2024) - Ken is currently undertaking the environmental compliance audits of this landmark construction project in the Sydney CBD. The conditions of project's Planning Approval requires annual independent environmental audit of compliance against the DP&E (NSW) Conditions of Approval. The project is part of the development of Sydney's commuter rail network expansion.

Client: Port Waratah Coal Loader (2018 and 2021)- Ken was the lead auditor for the last two independent environmental compliance audits of the Port Waratah Coal Loader located on Kooragang Island near Newcastle. The conditions of approval for the facility requires a three-yearly independent environmental audit of compliance against:

- DP&E Conditions of Approval / Development Approvals;
- Water Licences;
- Environment Protection Licence; and the
- EIS (Statement of Commitments).

These independent environmental audit were undertaken in accordance with AS/NZS ISO 19011:2014 and the Department of Planning and NSW EPA audit guidelines.

In addition to his role as lead auditor managing a multidisciplinary team, Ken covered the role as technical expert in surface water, air quality and noise management.

North Parkes Mine (2021)- Ken was the lead auditor for the environmental compliance audit of the Tritton Gold Mine in western NSW. The conditions of approval for the mine requires a three-yearly independent environmental audit of compliance against:

- DP&E Conditions of Approval / Development Approvals;
- Water Licences;
- Environment Protection Licence;
- Mining Leases; and the
- EIS (Statement of Commitments).

The independent environmental audit was undertaken in accordance with AS/NZS ISO 19011:2014 and the Department of Planning and NSW EPA audit guidelines.

Metropolitan Coal Mine (2018 and 2021)

Ken was the independent environmental auditor for the last two independent environmental compliance audits of the Metropolitan Coal Mine south of Sydney, NSW. These conditions of approval for the mine requires a three-yearly independent environmental audit of compliance against:

- DP&E Conditions of Approval / Development Approvals;
- Commonwealth Approvals;
- Water Licences;
- Environment Protection Licences;
- Mining Leases; and the
- EIS (Statement of Commitments).

The independent environmental audit was undertaken in accordance with AS/NZS ISO 19011:2014 and the Department of Planning and NSW EPA audit guidelines

In addition to his role as lead auditor managing a multidisciplinary team, Ken covered the role as technical expert in surface water management (covering the mine infrastructure areas), air quality and noise management.

Stratford and Duralie Coal Mines – (2020) Ken was the lead auditor for the environmental compliance audit of Ashton Coal Mine in the Hunter Valley. The conditions of approval for the mine requires a three-yearly independent environmental audit of compliance against:

- DP&E Conditions of Approval / Development Approvals;
- Water Licences;
- Environment Protection Licence;
- Mining Leases and the
- EIS (Statement of Commitments).

The independent environmental audit was undertaken in accordance with AS/NZS ISO 19011:2014 and the Department of Planning and NSW EPA audit guidelines.

Ashton Coal Mine (2020) - Ken was the lead auditor for the environmental compliance audit of Ashton Coal Mine in the Hunter Valley. The conditions of approval for the mine requires a three-yearly independent environmental audit of compliance against:

- DP&E Conditions of Approval / Development Approvals;
- EPBC Approvals;
- Water Licences;
- Environment Protection Licence;
- Mining Leases; and the
- EIS (Statement of Commitments).

The independent environmental audit was undertaken in accordance with AS/NZS ISO 19011:2014 and the Department of Planning and NSW EPA audit guidelines.

Newcastle Coal Infrastructure Group (2019 and 2022) - Ken was the lead auditor for the environmental compliance audits of the NCIG Coal Loader located on Kooragang Island near Newcastle. The conditions of approval for the mine requires a three-yearly independent environmental audit of compliance against:

- DP&E Conditions of Approval / Development Approvals;
- EPBC Approvals;
- Water Licences;
- Environment Protection Licence; and the
- EIS (Statement of Commitments).

The independent environmental audit was undertaken in accordance with AS/NZS ISO 19011:2014 and the Department of Planning and NSW EPA audit guidelines.

Kables Sand Quarry EPBC Audit (2019) – Ken was the auditor for the EPBC audit of Hansons Kables Sand Quarry located in the Blue Mountains in NSW. The audit was a requirement of the project EPBC approval and was undertaken in accordance with the DAWE Audit Guidelines.

Benedicts Recycling Mayfield) (2019)- Ken was the lead auditor for the environmental compliance audit of the Benedicts waste facility in Newcastle. The conditions of approval for the mine requires a three-yearly independent environmental audit of compliance against:

- DP&E Conditions of Approval / Development Approvals;
- Environment Protection Licence; and the
- EIS (Statement of Commitments).

The independent environmental audit was undertaken in accordance with AS/NZS ISO 19011:2014 and the Department of Planning and NSW EPA audit guidelines.

Triton Copper Mine (2018) - Ken was the lead auditor for the environmental compliance audit of the Triton Gold Mine in western NSW. The conditions of approval for the mine requires a three-yearly independent environmental audit of compliance against:

- DP&E Conditions of Approval / Development Approvals;
- Water Licences;
- Environment Protection Licence;
- Mining Leases; and the
- EIS (Statement of Commitments).

The independent environmental audit was undertaken in accordance with AS/NZS ISO 19011:2014 and the Department of Planning and NSW EPA audit guidelines.

Oberon Quarries (2019) - Ken was the lead auditor for the environmental compliance audit of this Gravel Quarry located in near Oberon in western NSW. The conditions of approval for the quarry requires a three-yearly independent environmental audit of compliance against:

- DP&E Conditions of Approval / Development Approvals;
- Environment Protection Licence; and the
- EIS (Statement of Commitments).

The independent environmental audit was undertaken in accordance with AS/NZS ISO 19011:2014 and the Department of Planning and NSW EPA audit guidelines.

Sibelco Dunes Sand Mine (2018 / 2019) – Ken was the auditor for the environmental compliance audit of the Sibelco Sand located near Nelson Bay in NSW. The conditions of approval for the mine required an independent environmental audit of against:

- DP&E Conditions of Approval / Development Approvals;
- EIS predications against actual impacts.

The Approval required that the audit be conducted within 12 months of completion of mining and focussed on mine site rehabilitation.

The independent environmental audit was undertaken in accordance with AS/NZS ISO 19011:2014 and the Department of Planning and NSW EPA audit guidelines

Ardglen Quarry (Daracon) (2018) - Ken was the lead auditor for the environmental compliance audit of the Ardglen Gravel Quarry located in the upper Hunter Valley. The conditions of approval for the quarry requires a three-yearly independent environmental audit of compliance against:

- DP&E Conditions of Approval / Development Approvals;
- Environment Protection Licence; and the
- EIS (Statement of Commitments).

The independent environmental audit was undertaken in accordance with AS/NZS ISO 19011:2014 and the Department of Planning and NSW EPA audit guidelines.

Holcim Hume Quarry (2017/8) - Ken was auditor for the environmental compliance audit of Holcim' hard rock quarry located near Queanbeyan in NSW. Ken undertook the compliance audits of the quarry's Conditions of Approval. The conditions of approval required a detailed assessment of compliance against:

- DP&E Conditions of Approval / Development Approvals
- Water Licences
- Environment Protection Licences.

The independent environmental audit was undertaken in accordance with AS/NZS ISO 19011:2014 and the Department of Planning and NSW EPA audit guidelines.

PGH Bricks (2017/8) - Ken was the lead auditor for the environmental compliance audits of PGH's NSW, QLD, Vic and SA quarries. Ken undertook the compliance audits of the quarries as required by the Conditions of Approval for each site. The conditions of approval required a detailed assessment of compliance against:

- DP&E Conditions of Approval / Development Approvals (for non-NSW sites)
- Mining (and Exploration) Leases
- Environment Protection Licences (or equivalent)

Enviroking (2017/8) - Ken was the lead auditor for an independent environmental audit undertaken in accordance with AS/NZS ISO 19011:2014 "Guidelines for auditing management systems" for the liquid waste facility. The audit reviewed Enviroking's compliance with conditions of approval, made recommendations to address non-compliances and identified opportunities for improvement in the project's environmental management and performance.

Ken has also undertaken compliance audits for a wide range of industries and projects including:

- Cowal Gold Mine
- Manildra Limited / Castlereagh Coal
- Bougainville Copper Limited (Bougainville, PNG)
- News Limited
- Fairfax News Papers
- Norske Skog
- Alcoa
- Ok Tedi Mining (PNG)
- Albright & Wilson
- Seafood Specialities
- Rio Tinto
- Hunter Water
- Department of Foreign Affairs and Trade
- Sydney Water
- Transport for NSW
- Mount Isa Mines
- Scott Transport
- Roads and Traffic Authority (now Roads and Maritime Services)
- AbiGroup (now LendLease)
- Leighton Contractors (now CPB Contractors)
- John Holland Group
- Queensland Transport
- PMP (Printing)
- Straits Resources
- Mount Isa Mines
- Philips (electronics)
- Bonlac Foods
- BHP

Ken has also led a wide range of Acquisition / Due Diligence audits for private sector clients in Australia, PNG, Africa, South Pacific, New Zealand, China, Singapore, Indonesia, Thailand.

Project Approvals

Central Station Re-development – Transport for NSW - Ken led the team responsible for gaining the environmental approvals (preparation of EMPs /construction licences etc.) for the Sydney Central Station project. In this role, Ken was responsible for the interpretation of the Approval requirements (Minister's Conditions of Approval) and the provision of strategic advice on the approvals, licencing, construction environmental management and stakeholder management.

Sydney Metro – Transport for NSW - Transport for NSW (TfNSW) commissioned two demolition contractors to demolish a number of multistorey buildings within the Sydney CBD in preparation for the construction of the Sydney Metro project. Ken led the team responsible for the preparation of environmental management plans for these works (TfNSW was not comfortable that the demolition contractors had the appropriate skills to prepare the required plans and gain the required approvals for the works). Ken worked with the demolition contractors to streamline their internal management processes and to add the requisite environmental management functions within both their corporate and project management systems.

M2 Widening Project Approvals (Roads and Maritime Services) – Ken (Project Manager) led the environmental approvals team for the preparation of the Environmental

Impact Assessment and construction approvals (preparation of EMPs /construction licence etc.) for the M2 widening project.

The management and minimisation of vegetation clearing on this project (along with the minimisation of impacts on residents) a high priority. Ken oversaw all the specialist studies that supported the preparation of the Environmental Impact Assessment and subsequent Environmental Management Plans, including:

- o Ecological survey;
- o Tree reports;
- o Noise and vibration impact assessments;
- o Contamination assessments;
- o Traffic impact assessments; and
- o Ground and surface water impact assessments.

Sydney Light Rail – Acciona / Transport for NSW - Ken led the team responsible for leading the construction approvals program and setting up the environmental management system for this significant brown fields infrastructure construction project. His responsibilities included:

- o Establishing the project Environmental Management System;
- o Interpreting the Conditions of Approval and the Project Deed and advising the Acciona management team on all aspects of compliance with those key approval and contractual documents;
- o Gaining the construction environmental approvals (preparation of EMPs /construction licences etc.) for the Sydney Light Rail project. In this role, Ken provided strategic advice on the approvals, licencing, construction environmental management and stakeholder management. He was also responsible for all internal (Acciona / KMH) document quality control.
- o Selecting, commissioning and supervising the wide range of specialist environment service providers including ecological survey, tree reports, and pre-construction vegetation clearance reports.
- o Advising the design and construction teams on tree clearing and management and integration of construction requirements into the flora and fauna management plans.

Ken also led the consultation with the NSW Government regulators and supported and mentored the Acciona Construction Environmental Manager. In addition, Ken personally led the community and business reference group consultation process on behalf of the design and construction joint venture, successfully gaining signoff from these consultation bodies on the environmental plans and strategies.

Environmental Management Representative (ER) - The role of Independent Environmental Representative on major infrastructure projects in NSW was established in 1998 and continues to be a requirement of the Conditions of Approval for all major infrastructure projects in NSW. The appointees are nominated by the project proponent or construction consortium but are approved by and report to the Director General of the Department of Planning and Environment (DPE).

The scope of the ER's role is broad range and includes:

- o Interpreting and advising on requirements of the Project Approval.
- o Reviewing and assessing the performance of the project against the Conditions of Approval, Project Deed and other relevant project related approvals. In that role, the ER reviews and approves all environmental related plans (EMPs), audits the implementation of environmental management plans and strategies, verifies (through audit and surveillance) compliance with the relevant project approval and project deed requirements, monitors and reports on regulatory compliance and provides reports to the Department and the project proponent on these matters.
- o Reports on compliance related issues to the public and investigates environmental and compliance issues, complaints and incidents.
- o Review and approval of vegetation clearing and other high (environmentally) impact activities.

Ken has fulfilled the role of Independent Representative on seven major infrastructure projects:

- o Hunter Expressway (Motorway construction, Hunter Valley) - (2011 – 2013)
- o Integral Energy 9JA Project (Transmission Line Construction Western Sydney) - (2006-2007)
- o Westlink M7 (40km Motorway project, Western Sydney) - (2003-2005)
- o Towra Beach Nourishment Project (Wet land protection, dredging project, Botany Bay) - (2004)
- o Warragamba Dam Auxiliary Spillway Project- (1998 – 2013)
- o Cronulla Sewage Treatment Plant Upgrade – (1998 – 2000)
- o Liverpool Sewage Treatment Plant Upgrade – (2000)

Upper Hunter Valley Alliance (UHVA) – Leighton Contractors /ARTC - Ken led the team responsible for the provision of the environmental approvals (preparation of EMPs /construction licences etc.) on this major ARTC rail infrastructure program in the Hunter Valley of New South Wales. Ken's team on this project provided the entire environment and community and stakeholder team as a Sub-Alliance partner. In this role, Ken provides strategic advice on the approvals, licencing, construction environmental management and stakeholder management. His responsibilities included:

- o Establishing the project Environmental Management System;
- o Interpreting the Conditions of Approval and the Project Deed and advising the Leighton management team on all aspects of compliance with those key approval and contractual documents;
- o Gaining the construction environmental approvals (preparation of EMPs /construction licences etc.) for range of projects delivered by the Alliance. In this role, Ken provided strategic advice on the approvals, licencing, construction environmental management and stakeholder management. He was also responsible for all internal document quality control.
- o Selecting, commissioning and supervising the wide range of specialist environment service providers

including ecological survey, tree reports, and pre-construction vegetation clearance reports.

- Advising the design and construction teams on tree clearing and management and integration of construction requirements into the flora and fauna management plans.

Other relevant Infrastructure Projects led by Ken include:

- Joint Defence Headquarter Construction Project (ACT) – Environment Approvals Manager
- Melbourne Desalination Plant Project – EMP preparation
- Ballina Bypass (Pacific Highway construction project) - Environment Approvals Manager
- Northern Hume Alliance (Hume Highway Duplication) - Environment Approvals and Community Manager
- Anvil Hill Coal Mine (Hunter Valley) - Environment Approvals Manager
- Shannon Creek Dam Construction Project - Environment Approvals and Community Manager
- Liverpool to Ashfield Pipeline Project (Sydney Water) - Environmental Approvals Manager
- Networks Alliance (Sydney Water –water and sewage mains renewals project) – KMH Management Representative
- Technical Reviewer and Economic Impact Analyst – DEC Construction Noise Management Guidelines (2006)
- Northwest Transit Way - Environment Approvals Manager
- Lane Cove Tunnel - Environment Advisor to Approvals and Construction Team
- North Connex – Environmental Management Plan preparation, consistency assessments and preparation of Environmental Impact Assessments to support variations to the project approvals
- Sydney Desal Plant -Internal QA Reviewer
- Keepit Dam Safety Upgrade – Project Director
- Cordeaux Water Treatment Plant – Lead Consultant and Project Manager

Investigative / Expert Roles

Minter Ellison – Expert Opinion / Report (2018/9) - Ken was commissioned by Minter Ellison on behalf of their client (a consortium of major construction contractors) to provide an expert opinion regarding the interpretation of impact of changes to the Conditions of Approval for a major Sydney linear infrastructure project on environmental investigation and reporting obligations and project cost impacts. This expert opinion was commissioned to support the resolution of a contractual dispute between the consortium and their client.

Environment Protection Authority — Investigation of Illegal Land Clearing and Waste Disposal Activities (April 2015 – July 2017) - Ken was the lead auditor for the investigations undertaken by the KMH team commissioned by Barnett & May

the NSW Environment Protection Authority (EPA) to investigate an alleged illegal vegetation clearing and waste disposal operations located in the Hunter Valley, Hawkesbury River Basin and Arcadia (north western Sydney). Ken developed and supervised the implementation site investigation strategies that included a series of investigative processes designed to identify the location and extent of vegetation clearing, and to determine the depth and volumes of buried construction and demolition wastes.

Environment Protection Authority — Expert Reports Illegal Land Clearing and Waste Disposal Activities (2018)

- Ken was commissioned by the NSW Environment Protection Authority (EPA) to provide expert opinion regarding the alleged illegal vegetation clearing and waste disposal at a site in the Hawkesbury River Basin and Arcadia (north western Sydney).

Ken was subsequently briefed to provide expert opinion in the legal actions taken by the EPA in these matters.

Qenos Mandatory Environmental Audit - Ken was commissioned as the Expert Independent Environmental Auditor (Lead Auditor) for the Qenos Mandatory Audit. As a result of a series of environmental incidents, Qenos were required by the NSW EPA to commission an independent auditor to determine if the plant is capable of being operated and maintained and if the plant is being competently operated and maintained, in order to minimise the risk of environmental incidents and better protect the environment.

In doing this, the audit Assessed the:

- adequacy of Risk Assessment procedures and practices
- adequacy of maintenance and operational Systems
- physical condition and reliability of the Plant
- adequacy and suitability of environmental risk management
- adequacy and suitability of performance monitoring equipment
- processes and procedures for identifying and rectifying plant and equipment issues.

Incidents and assessed of the adequacy the investigations and responses to those incidents.

Orica Port Botany Ground Water Remediation Project – Expert Auditor - Ken was the lead auditor for the independent compliance audit of the Orica groundwater remediation project. These annual audits were a condition of licence established by the (then) Department of Environment and Climate Change and the Department of Planning.

Other

Kelian Equatorial Mining (Kalimantan, Indonesia) - Ken led a specialist environmental and social impact audit team that was established by Rio Tinto (and approved by the Government) to investigate and report on the environmental and social impacts associated with alluvial mining operations (downstream) from the Rio Tinto (major owner) operated gold mine located in the remote, mountainous region of Kalimantan. The audit team included Government representatives and was undertaken to address the concerns of local village communities that were being impacted socially and economically.

Bougainville Copper Limited (Bougainville, PNG) - Ken led two specialist projects for Bougainville Copper Limited. Including Investigation of the Loloho Port Facility on Bougainville Island. Ken led the investigation team commissioned to identify and plan for the clean-up of hazardous chemicals left after BCL evacuated Bougainville at the commencement of the civil war in 1990. The investigation covered gases, PCBs, and minerals processing chemicals. The second project was clean up and destruction of chlorine and other compressed gases located at the Loloho Port facility on Bougainville Island.

Ken subsequently led a team dispatched to Bougainville to chemically destroy 1 tonne of chlorine and other toxic gases. The team built a treatment plant on site and successfully removed the toxic gas threat.

Waste Management

Review of Energy to Waste Technologies – Client Confidential (Australian Based Waste Management Company)

Ken participated (as technical reviewer) in the preparation of a technical review of energy to waste technologies for a major waste management group operating in Australia. The purpose of the review has to provide the client with a detailed assessment of all available and emerging energy to waste technologies available including determining the barriers to implementation within the Australian market, political and social framework.

Shredder Waste Disposal Assessment – Sims Metal

Metal shredders produce a complex waste stream consisting of a mixture of plastic, rubber, metal and other materials that is costly to dispose of. Ken led the KMH team that researched the options for management of this waste stream and prepared recommendations for the development of waste treatment and disposal options (including energy extraction) for Sims Metal.

Compliance Table SSD 6464 Warkworth Mining

Appendix A1

Project Approval SSD 6464 Warkworth Continuation Project (Mod 2)								
Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
S2 C1	Obligation to Minimise Harm to the Environment	In addition to meeting the specific performance criteria established under this consent, the Applicant must implement all reasonable and feasible measures to prevent and/or minimise any material harm to the environment that may result from the construction, operation, or rehabilitation of the development.	Documents as noted below			Although there have been incidents and non-compliances with the conditions of approval, it was observed during the site inspection and through interviews and site observations made during the audit that the measures implemented on site were reasonable and feasible with appropriate corrective actions implemented in the event of incidents and non-compliances.	Complies	
S2 C2	Terms of Consent	The Applicant must carry out the development: <ul style="list-style-type: none"> a. generally, in accordance with the EIS and Modification Report (MOD 2); and 				Based on the observations made during the site inspection, review of management plans, monitoring data and other records, it may be reasonably concluded that the Development is being undertaken generally in accordance with the EIS and Modification Report (MOD 2). An appropriate level of resourcing has been applied to manage compliance with the Development Consent	Complies	
		<ul style="list-style-type: none"> b. in accordance with the conditions of this consent 				There have been some instances where the condition of this consent has not been complied with, therefore compliance with this condition has not been achieved. Refer to individual conditions below.	Noted	
S2 C3	Terms of Consent	If there is any inconsistency between the above documents, the most recent document must prevail to the extent of the inconsistency. However, the conditions of this approval must prevail to the extent of any inconsistency.					Noted	
S2 C4	Terms of Consent	The Applicant must comply with any reasonable requirement/s of the Planning Secretary arising from: <ul style="list-style-type: none"> a) any reports, strategies, plans, programs, reviews, audits or correspondence that are submitted in accordance with this consent; 	Letter from Yancoal (G. Mulhearn) to DPE (A Hagerthy) titled "Warkworth Mining Limited (SSD 64-64)- Blast Event (N39-BF8-MD1). DPE Ref SSD- 6464-PA-37", dated 3 March 2022 Letter from DPE (H. Watters) to Yancoal (G. Mulhearn) titled "Warkworth Continuation (SSD-6464)- Blast Exceedance 24 February 2022			DPE directed Yancoal to update and resubmit the Blast Management Plan to review following their review of the blasting incident report submitted to the Department on the 3 March 2022. The revised BMP was submitted to DPE on the 20 th of January 2022 and approved on the 24 th of March 2023	Complies	
		<ul style="list-style-type: none"> b) any reports, reviews or audits commissioned by the Department regarding compliance that are submitted in accordance with this consent; 		Environment and Community Manager – no reports, reviews or audits were commissioned by the Department		No reports, reviews or audits were commissioned by the Department	Not triggered	
		<ul style="list-style-type: none"> c) the implementation of any actions or measures contained in these documents. 				The Auditor has reviewed correspondence between MTW and DPE and found that MTW has responded to directions issued by DPE during this audit period	Complies	
S2 C5	Limits on Consent Mining Operations	The Applicant may carry out mining operations on site for 21 years from the date of commencement of development under this consent	Noted				Noted	

Project Approval SSD 6464 Warkworth Continuation Project (Mod 2)								
Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
S2 C6	Coal Extraction	The Applicant must not extract more than 18 million tonnes of ROM coal from the Mt Warkworth mine in a calendar year.	Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023		Photograph 1 – Warkworth Open Cut Mine	Table 4.1 of each Annual Review documents the following tonnages of ROM coal extracted: <ul style="list-style-type: none"> 2020 – 16.6 2021 – 16.08 2022 – 12.41 The recorded tonnages are less than the maximum tonnage prescribed by this condition.	Complies	
S2 C7	Coal Transport	The Applicant Must: <ul style="list-style-type: none"> a) not transport any coal produced at the development by public road; and 	Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023		No coal was observed to be exported transported on public roads from the site during the audit inspection.	The coal transportation records indicate that coal is only transferred from the site by Rail.	Complies	
		<ul style="list-style-type: none"> b) ensure that the coal produced on site is only sent to Mt Thorley Coal Loader for transport by rail to export and/or domestic markets 	Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023		No coal was observed to be exported from the site during the audit inspection. All coal was transported internally by truck to the Coal Loader for export by train	The coal transportation records indicate that coal is only transferred from the site by Rail.	Complies	
S2 C8	Commencement of Development Under This Consent	The Applicant must: <ul style="list-style-type: none"> a) notify the Planning Secretary in writing of the date of commencement of development under this consent; and 	MTW Independent Environmental Audit 2017 Independent Audit Report Jacobs, 8 th of August 2018		Assessed as compliant during the 2017 audit. 2017 Auditor sighted Letter dated, commencement date 15 th February 15 th February 2016		Complies	
		<ul style="list-style-type: none"> b) may only commence development under this consent once the Planning Secretary has agreed in writing that all prerequisites to the commencement of development under this consent have been met. 	MTW Independent Environmental Audit 2017 Independent Audit Report Jacobs, 8 th of August 2018		Assessed as compliant during the 2017 audit. DPE letter dated 8 th February 2016 notifying MTW that all required documentation was in place.		Complies	
S2 C9	Surrender of Existing Development Consent	By the end of January 2017, unless the Planning Secretary agrees otherwise, the Applicant must surrender the existing development consent (DA-300-9-2002-i) for the Warkworth mine in accordance with Section 104A of the EP&A Act. Following the commencement of development under this consent, the conditions of this consent shall prevail to the extent of any inconsistency with the conditions of DA-300-9-2002-i.	Letter from Yancoal (G. Mulhearn) to DPE (H. Reed) titled “Development Consent” Warkworth Mining Limited” dated 4 June 2019 Letter from DPE (H Reed) to Yancoal (G. Mulhearn) dated 13 June 2019 Letter from DPE (M Sprott) to Yancoal (G. Mulhearn) titled “Surrender of Warkworth Development Consent (DA 300-9-20020i) dated 2 July 2021			Reported as non-compliant in the 2020 Annual Review. No documentation was available to the auditor that confirmed that the existing consents had been surrendered.	Non-compliant	Work with DPE is close out the surrender of the development consents.
S2 C10	Structure Adequacy	The Applicant must 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 and SA NSW.	Acrocert Construction Certificate – Notice of Determination number 2022-0781 dated 30 November 2022 (In Pit Offices) Acrocert Complying Development – Notice of Determination number 2022-0132 dated 30 November 2022 (Communications Tower) Acrocert Construction Certificate – Notice of Determination number 2022-0534 dated 7 December 2022 (New Workshop)	Environment and Community Manager - The following facilities were constructed during this audit period: <ul style="list-style-type: none"> In Pit Offices (Construction Certificate) MTW North Workshop 		AcroCert have been appointed as the independent certifier have provided construction certificates and certificates of compliance for the following buildings <ul style="list-style-type: none"> In Pit Offices (Construction Certificate) MTW North Workshop Each of the Certificates notes the BCA Classification	Complies	

Project Approval SSD 6464 Warkworth Continuation Project (Mod 2)								
Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
S2 C11	Demolition	The applicant must ensure that all demolition work on site is carried out in accordance with AS 2601-2001: The Demolition of Structures, or its latest version.		Environment and Community Manager – no demolition works were undertaken during the audit period.		No demolition works were undertaken during the audit period.	Not Triggered	
S2 C12	Protection of Public Infrastructure	Unless the Applicant and the applicable authority agree otherwise, the Applicant must:		Environment and Community Manager – no damage to public road associated with any MTW works occurred during the audit period.		No damage to public road associated with any MTW works occurred during the audit period.	Not Triggered	
		a) repair, or pay the full costs associated with repairing, any public infrastructure that is damaged by the development; and		Environment and Community Manager – no damage to public road associated with any MTW works occurred during the audit period.		No damage to public road associated with any MTW works occurred during the audit period.	Not Triggered	
S2 C12	Protection of Public Infrastructure	b) relocate, or pay the full costs associated with relocating, any public infrastructure that needs to be relocated as a result of the development.		Environment and Community Manager – no damage to public road associated with any MTW works occurred during the audit period.		No damage to public road associated with any MTW works occurred during the audit period.	Not Triggered	
S2 C13	Operation of Plant and Equipment	The Applicant must ensure that all plant and equipment used on site, or to monitor the performance of the development, is maintained and operated in a proper and efficient manner	Plant and Equipment maintenance records.	Maintenance Manager demonstrated the operation of the mine Maintenance Management System. The system provides a framework for the management of routine maintenance and the identification and rectification of plant and equipment issues.	Designated equipment maintenance areas were inspected. Complex management systems and equipment are implemented to plan and record routine servicing and unplanned maintenance for items of plant, including coal trucks, drill rigs etc.	Designated equipment maintenance areas were inspected. Complex management systems and equipment are implemented to plan and record routine servicing and unplanned maintenance for items of plant, including coal trucks, drill rigs etc. The maintenance management system implemented at the mine are designed to ensure the efficient operation of plant and equipment were comprehensive	Complies	
S2 C14	Updating & Staging of Strategies, Plans and Programs	With the approval of the Planning Secretary, the Applicant may:		Environment and Community Manager – MTW submits management plans as required during the audit period.			Noted	
		a) submit any strategy, plan or program required by this consent on a progressive basis; and		Environment and Community Manager – MTW submits management plans as required during the audit period.			Noted	
		b) combine any strategy, plan or program required by this consent with any similar strategy, plan or program required for the Mt Thorley mine.		Environment and Community Manager – MTW submits management plans as required during the audit period.				
		To ensure these strategies, plans or programs are updated on a regular basis, the Applicant may at any time submit revised strategies, plans or programs to the Planning Secretary for approval. With the agreement of the Planning Secretary, the Applicant may prepare any revised strategy, plan or program without undertaking consultation with all parties under the applicable condition of this consent.	Letter from DPE (J. Fittell) to Warkworth Mining Limited (G Mulhearn) titled "Approval of Warkworth Continuation Project Blast Management Plan" dated 24 March 2023			During the audit period, a number of management plans were reviewed and updated, including (but not limited to) the Environmental Strategy, Noise Management Plan and the various biodiversity management plans. In their letter of approval for the Blast Management Plan dated 24 March 2023,, DPE agreed that in accordance with Condition 14 of Schedule 2, that consultation with each of the relevant parties listed in Condition 16 of Schedule 3 is not required given the administrative updates.	Complies	

Project Approval SSD 6464 Warkworth Continuation Project (Mod 2)								
Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
S2 C15	Community Enhancement Program	Within 6 months of the date of this consent, unless the Planning Secretary agrees otherwise, the Applicant must enter into a VPA with Council in accordance with: a) Division 6 of Part 4 of the EP&A Act; and	Independent Environmental Audit Report for Yancoal Mt Thorley Warkworth, Hansen Bailey, July 2020 Agenda, Mt Thorley Warkworth Voluntary Planning Agreement Community Meeting, 1 June 2023			Assessed as compliant by the 2020 audit.	Complies	
		b) the terms of Applicant's offer in its letter to the Department dated 4 May 2015	Minutes, Mt Thorley Warkworth Voluntary Planning Agreement Community Meeting, 9 February 2023			Assessed as compliant by the 2020 audit	Complies	
		The VPA must include provisions for the payment, collections, management and distribution of the contributions under the agreement, with a focus on funding community infrastructure and services in the area surrounding, including Bulga Village.	Agenda, Mt Thorley Warkworth Voluntary Planning Agreement Community Meeting, 9 February 2023 Minutes, Mt Thorley Warkworth Voluntary Planning Agreement Community Meeting, 3 November 2022			Assessed as compliant by the 2020 audit	Complies	
		<i>Note: The Applicant's offer comprises a total contribution of \$11 million over 21 years for both the development and the Warkworth Continuation Project (SSD-6464).</i>	VPA: Warkworth and Mt Thorley Continuation Prohects, financial statement as at 31 December 2022			Assessed as compliant by the 2020 audit Implementation of the VPA is ongoing, a committee has been established which includes Singleton Council, minutes are kept of meetings with financial documents providing a record of contributions.	Complies	
S3 C1	Acquisition on Request	Upon receiving a written request for acquisition from the owner of the land listed in Table 1, the Applicant shall acquire the land in accordance with the procedures in conditions 5 and 6 of schedule 4.		Environment and Community Manager- Zero acquisitions have occurred during the audit period		No acquisitions have occurred during the audit period	Not Triggered	
	Table 1	Acquisition Basis	Land					
		Noise and Air	77, 102, D, E, F					
		Noise	34, 81, 148, 150, 190, 192, J					
Air	A, B							
S3 C2	Acquisition on Request	The applicant is only required to acquire property 77 if the owner no longer has voluntary land acquisition rights under the planning approvals for Wambo mine or its associated rail facilities.		Environment and Community Manager- Zero acquisitions have occurred during the audit period		No acquisitions have occurred during the audit period	Not Triggered	
S3 C3	Additional Mitigation on Request	Upon receiving a written request from the owner of any residence on the land listed in Table 1 or Table 2, the Applicant must implement additional noise and /or air quality mitigation measures at or in the vicinity of the residence in consultation with the landowner. These measures must be consistent with the measures outlined in the Voluntary Land Acquisition and Mitigation Policy. They must also be reasonable and feasible and proportionate with the level of predicted impact.	Letter from Gorton Law (K Gorton) to Yancoal (G Mulhearn) titled "258 The Inlet Road, Bulga Noise Mitigation" dated 21 February 2020 Email from Yancoal (G Mulhearn) to Gorton Law (K Gorton) titled "Noise Mitigation – 258 the Inlet Road Bulga" dated 26 March 2023" Letter from Yancoal (G.Mulhearn) to Packtron Packaging (M Kalt) titled "Mitigation on Request in respect of 258 the Inlet Road Bulga" dated 4 June 2023 Email from Yancoal (G. Mulhearn) to Packton Packaging (M Kalt) titled "258 Inlet Road Bulga Noise Mitigation" dated 31 May 2023			One mitigation request received. Packtron Packaging – ID#217 on 21/2/20. Status: -One winery building and one cabin on the property. Confirmatory development consent / occupation certificate documentation provided by owner (2020-2021), review of which buildings would be eligible for mitigation conducted. -4/6/21 – Letter provided to landowner indicating cabin is eligible for mitigation, and winery building is not a residence so is not eligible. 2021-2022 – COVID delays – paused progression on request of landowner. The landowner indicated they would be in touch when lockdown is over in Sydney. -31/5/23 – MTW got back in contact with landowner to progress mitigation.	Complies	

Project Approval SSD 6464 Warkworth Continuation Project (Mod 2)								
Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
S3 C3	Additional Mitigation on Request	If within 3 months of receiving this request from the owner, the Applicant and the Owner cannot agree in the measures to be implemented, or there is a dispute about the implementation of these measures, then either party may refer to matter to the planning secretary for resolution.	Letter from Yancoal (G.Mulhearn) to Packtron Packaging (Pty Ltd) titled "Mitigation Upon Request in Respect of 258 The Inlet Road Bulga NSW			There have not been any disputes referred to the Planning Secretary for Resolution, there have been ongoing negotiations with the property at 258 The Inlet Road, Bulga (Property 217), however these have now been resolved and Yancoal have agreed to provide mitigation.	Not Triggered	
	Table 2	Mitigation Basis	Characterisation of Impact	Land				
		Noise	Moderate	12, 14,15, 126, 128, 130, 139, 152, 183, 191, 192, 217, 262, 263				
S3 C4	Noise Criteria – Before 1 Jan 2017	Before 1 January 2017, except for the land in Table 1, the Applicant must ensure that the noise generated by the Development does not exceed the noise criteria in condition 18 of DA-300-9-2002-i.	Independent Environmental Audit Report for Yancoal Mount Thorley Warkworth, Hansen Bailey, July 2020			The condition applies to the period prior to this audit period. An assessment of compliance against this condition was provided in the IEAs of previous audit periods.	Not Triggered	
S3 C5	Noise Criteria – from 1 Ja 2017	From 1 January 2017, except for the land in Table 1, the Applicant must ensure that the noise generated by the Development does not exceed the noise criteria in Table 3 at any residence on privately owned land.	Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023	<p>Environment and Community Manager – the downward trend in noise complaints is a reflection of the improvement in performance and community relations.</p> <ul style="list-style-type: none"> Noise complaints from previous years 2016 (325), 2017 – 191 (171), 2019 (112) 2020 (98), 2021 (49), 2022 (47), 2023 (to end April 2023) – 11 MTW implements a noise enhancement prediction tool for planning. This and weather forecast conditions are reviewed prior to shift and MTW actively manages planned works with respect of atmospheric conditions that are present on any given night. Whilst there have been 6 exceedances of noise criteria by external attended noise monitoring in the 3-year audit period in 2022, these have occurred on only 3 nights during in the audit period. Of those nights, the incident on 5/4/22 and 15/9/22 had measured noise within the noise limits, and only exceeded due only to a low frequency penalty required to be applied. The 20/7/22 exceedance was caused by total noise, and low frequency penalty. 		<p>Section 6.2.2/3 of each Annual Review presents the results of the noise monthly noise monitoring undertaken by independent consultants.</p> <p>A summary of compliance is as follows:</p> <ul style="list-style-type: none"> 2020 – no non compliances reported 2021 - no non compliances reported 2022 – six exceedances of the noise criteria were recorded <p>One hundred and fifty-seven (157) noise complaints were received during the audit period. This consisted of 98 complaints in 2020, 49 in 2021, 47 in 2022 and 11 in 2023 (to the end of April).</p> <p>While there has been an improvement over the life of the project in the number of complaints (325 recorded in 2016), a contributing factor to the higher number of complaints during the early operational stages may potentially be attributed to a higher proportion of activities closer to ground level, with improvements achieved over the project life due to attenuation provided by the pit depth, mine walls and in acoustic vehicle technology.</p> <p>Prior to each shift, a predictive tool is utilised to assess potential impacts and considers meteorological conditions.</p> <p>Following the receipt of noise complaints, a CRO is deployed to make observations and measure noise levels (5-minute sample). In many instances the CROs observations have verified the complaint and the noise readings have indicated that the noise levels from the mine were exceeding the relevant criteria.</p> <p>Where these potential exceedances are identified, MTW review the works being undertaken at the likely exceedance source and make changes to those works to reduce noise emissions.</p> <p>The Auditor understands that no noise modelling of future works that may impact sensitive receivers is not routinely undertaken.</p>	Non-compliant	<p>Review current predictive tools and processes against available models that are currently being utilised in both the mining and construction industries with the objective of:</p> <ul style="list-style-type: none"> Identifying areas on site that have the potential to impact noise sensitive receivers; Provides a Noise Impact Prediction Model that can be used by MTW to plan works in those areas with the objective to proactively ensure that noise from plant and equipment does not cause annoyance to local community and exceed the relevant criteria.

Project Approval SSD 6464 Warkworth Continuation Project (Mod 2)											
Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections		Assessment		Finding	Recommendations	
S3 C5	Table 3	Location	Land		Day (LAeq (15min))	Evening (LAeq (15min))	Night (LAeq (15min))	Night (LA1(1min))			
		Bulga	17,19		40	40	40	50			
			37, 43, 52, 62, 63, 63, 66, 71, 72, 73, 75, 82, 210, 211, 236, 252, 920		39	39	39	49			
			12, 14, 15, 16, 18, 20, 21, 22, 23, 24, 26, 28, 31, 35, 36, 38, 39, 40, 41, 42, 44, 45, 46, 47, 48, 49, 50, 53, 54, 55, 56, 57, 58, 60, 61, 67, 70, 74, 80, 84, 89, 215, 217, 229, 231, 234, 235, 237, 238, 243, 253, 254, 903, 917, 918, 919, 921, 929		38	38	38	48			
			8, 9, 225, 226, 227, 228, 230, 266, 922		37	37	37	47			
			4, 6, 7, 10, 221, 222, 223		36	36	36	46			
			All other residences on private land		35	35	35	45			
		Mibrodale	111		36	36	36	46			
			All other residences on private land								
		Warkworth	All other residences on private land								
		Maison Dieu	All other residences on private land								
		Gouldsville, Long Point	126, 262		41	41	41	51			
			128		39	39	39	49			
			130, 139		38	38	38	48			
			All other residences on private land		35	35	35	45			
		Hambledon Hill / Wyles Flat	192		40	40	40	50			
			152,191,263		39	39	39	49			
			183		38	38	38	48			
			181, 182, 184, 185, 186, 187, 937a, 937b		37	37	37	47			
			155, 156, 157, 180, 937d, 937e		36	36	36	46			
			All other residences on private land		35	35	35	45			
		Mt Thorley	144, 915		43	43	43	53			
			146		42	42	42	52			
			148, 188		36	36	36	46			
All other residences on private land			35	35	35	45					
S3 C6	Operating Conditions	The Applicant must: a) implement all reasonable and feasible measures to minimise the operational, low frequency and road noise of the development;	Noise Management Plan, Mt Thorley Warkworth, Rev 5.2 dated 8 August 2022 Thearle Engineering, Sound Power Determination, Mobile Machinery CAT D10T2 Dozer, Serial Number RAB01006 Ful Sound Kit, 25 June 2021 Thearle Engineering, Sound Power Determination, Mobile Machinery CAT D10T2 Dozer, Serial Number KSN00309 Ful Sound Kit, 25 June 2021 Caterpillar MD 6250 Unit 231, Sound Power Assessment, Westrac Pty Ltd Global Acoustics 7 May 2023 Hitachi EH5000-AC3 Mount Thorley Warkworth, Sound Power by sound pressure level assessment, Hitachi Construction Machinery (Australia) Pty Ltd, 16 April 2020			Operating mining plant was observed during the site inspection.	As observed during the site inspection several mitigation measures have been implemented on site including noise attenuation on items of plant and equipment, no reversing beepers used (non-tonal reversing alarms instead), regular service inspections and site induction. In addition, a comprehensive noise monitoring and complaints management system has been implemented.	Complies			
			b) operate a comprehensive noise management system on suite 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 consent;	Noise Management Plan, Mt Thorley Warkworth, Rev 5.2 dated 8 August 2022 Complaints Register	Environment and Community Manager- A noise enhancement report is generated each night indicating predictive noise enhancement for the coming night shift. The Community Response Officers' work instructions includes a review of the noise enhancement report.		6.3.5 of the Noise Management Plan describes the proactive noise mitigation processes implemented by MTW. "An assessment of (weather) forecast information at the commencement of each night shift identifies likely direction of meteorological enhancement of noise (if any). MTW has developed a simple noise enhancement prediction tool that uses WRF forecast data to predict source to receptor sonic gradients for the key noise propagation pathways from MTW to nearby sensitive receptors.	Complies			

Project Approval SSD 6464 Warkworth Continuation Project (Mod 2)								
Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
						Handheld noise monitoring is undertaken on a proactive basis in neighbouring communities on a night-to-night basis, as well as in response to triggers and complaints". Note however the Auditor's recommendation in S3 C3 above		
S3 C6	Operating Conditions	c) minimise the noise impacts of the development during meteorological conditions when the noise limits in this consent do not apply (see Appendix 7); and	Noise Management Plan, Mt Thorley Warkworth, Rev 5.2 dated 8 August 2022 Complaints Register	Environment and Community Manager- A noise enhancement report is generated each night indicating predictive noise enhancement for the coming night shift. The Community Response Officers' work instructions includes a review of the noise enhancement report.		6.3.5 of the Noise Management Plan describes the proactive noise mitigation processes implemented by MTW. "An assessment of (weather) forecast information at the commencement of each night shift identifies likely direction of meteorological enhancement of noise (if any). MTW has developed a simple noise enhancement prediction tool that uses WRF forecast data to predict source to receptor sonic gradients for the key noise propagation pathways from MTW to nearby sensitive receptors. Handheld noise monitoring is undertaken on a proactive basis in neighbouring communities on a night-to-night basis, as well as in response to triggers and complaints". Note however the Auditor's recommendation in S3 C3 above	Complies	
		d) ensure that; • all new trucks, dozers, drills and excavators purchased for use on the site after the date of this consent are commissioned as noise suppressed (or attenuated) units; and • the existing fleet of trucks, dozers, drills and excavators on site at the date of this approval is progressively fitted with suitable noise attenuation packages to ensure that 100% of the fleet being used on site is attenuated by the end of 2016; and	Thearle Engineering, Sound Power Determination, Mobile Machinery CAT D10T2 Dozer, Serial Number RAB01006 Ful Sound Kit, 25 June 2021 Thearle Engineering, Sound Power Determination, Mobile Machinery CAT D10T2 Dozer, Serial Number KSN00309 Ful Sound Kit, 25 June 2021 Caterpillar MD 6250 Unit 231, Sound Power Assessment, Westrac Pty Ltd Global Acoustics 7 May 202. Hitachi EH5000-AC3 Mount Thorley Warkworth, Sound Power by sound pressure level assessment, Hitachi Construction Machinery (Australia) Pty Ltd, 16 April 2020.	Environment and Community Manager – All HME was fitted with noise attenuation by the end of 2016	Examples of noise attenuation on items of plant and equipment were observed during the site inspection	The Auditor sighted records (and observed sound attenuated plant) that verified proactive noise attenuation of plant and equipment is being undertaken.	Complies	
		e) carry out regular monitoring to determine whether the development is complying with the relevant conditions of this consent and, if necessary, adjust the scale of operations on site to meet the criteria in this consent	Yancoal internal environmental monitoring and reporting system: Insite Yancoal Australia			A comprehensive network of noise monitors has been established with monitoring results reported on the MTW website (Insite). The website provides details of any operational changes made due to excessive noise.	Complies	

Project Approval SSD 6464 Warkworth Continuation Project (Mod 2)								
Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
S3 C7	Noise Management Plan	The Applicant must prepare a Noise Management Plan for the development to the satisfaction of the Planning Secretary and carry out the development in accordance with this plan. The plan must:	Noise Management Plan, Mt Thorley Warkworth, Rev 5.2 dated 8 August 2022 Letter from DPE (J. Fittell) to Warkworth Mining Limited (G Mulhearn) titled "Noise Management Plan for Mt Thorley Continuation Project (SSD 6465) and Warkworth Continuation Project (SSD 6464)" dated 8 August 2022.			During the audit period, the NMP was updated with version 5.2 of the NMP approved on the 8 th of August 2022. 2022 Annual Review prepared by MTW reported a non-compliance against this condition due to exceedances of noise criteria during that audit period. However, it is noted that this should have been recorded against condition S3 C5.	Complies	
		a) be prepared in consultation with the EPA, and submitted to the Planning Secretary for approval prior to the commencement of any development under this consent;	Letter from Yancoal (G. Mulhearn) to EPA (N Ryan) titled "Yancoal, Mt Thorley Warkworth EPA Consultation on Noise, Air Quality Blasting and Water Management Plans" dated 18 July 2018 Letter from EPA (N Ryan) to Yancoal (G Mulhearn) titled Environment Protection Licences 1376 and 1976 Environmental Management Plans" dated 19 July 2018 Independent Environmental Audit Report for Yancoal Mount Thorley Warkworth, Hansen Bailey, July 2020			The noise management plan was issued to EPA on 18 th July 2018 for consultation. The EPA did not provide any comments, noting it is not their role to review such plans. Appendix C of the NMP includes the correspondence with the EPA. 2020 Audit viewed the Secretary's Approval of the Plan dated 28 August 2018	Complies	
		b) describe the measures that would be implemented to ensure compliance with the relevant noise criteria and operating conditions of this consent;	Noise Management Plan, Mt Thorley Warkworth, Rev 5.2 dated 8 August 2022			Section 6 of the NMP	Complies	
		c) describe the proposed noise management system in detail;	Noise Management Plan, Mt Thorley Warkworth, Rev 5.2 dated 8 August 2022			Section 8.1.3 of the NMP	Complies	
		d) include provisions for keeping the local community informed about the operation of the noise management system and monitoring programs (including any correction factors under the NSW Industrial Noise Policy), including regular briefings and a public information session within 6 months of granting this development consent;	Noise Management Plan, Mt Thorley Warkworth, Rev 5.2 dated 8 August 2022			Appendix A of the NMP	Complies	
		e) include a noise monitoring program that: •evaluates and reports on: - the effectiveness of the noise management system and the the noise attenuation program (see condition 6(d)); - compliance against the noise criteria in this consent; and noise operating conditions; • includes a program to calibrate and validate the real-time noise monitoring results with the attended monitoring results over time (so the real-time monitoring program can be used as a trigger for further attended monitoring where there is a risk of non-compliance with the Noise criteria in this consent); and • defines what constitutes a noise incident and includes a protocol for identifying and notifying the Department and relevant stakeholders of any noise incidents.	Noise Management Plan, Mt Thorley Warkworth, Rev 5.2 dated 8 August 2022			Appendix A of the NMP	Complies	

Project Approval SSD 6464 Warkworth Continuation Project (Mod 2)									
Cond.	Title	Condition	Documents Reviewed		Interviews	Audit Inspections	Assessment	Finding	Recommendations
S3 C8	Blasting Criteria	The Applicant must ensure that the blasting on the site does not cause exceedances of the criteria in Table 4. These criteria do not apply if the Applicant has a written agreement with the relevant owner.	Year to Date Blasting Records – 2020 Year to Date Blasting Records – 2021 Year to Date Blasting Records – 2022 Year to Date Blasting Records – 2023				The 2022 Annual Return reported that blast event n39-bfb-md1 & n39-bfb-ps1c produced an air blast overpressure of 125.5 dB received at the Warkworth monitoring station (EPA Point 4). The blast was investigated, and it was determined that the overpressure reading did not occur at a residential property, therefore the incident is not considered to be a non-compliance.	Complies	
	Table 4	Location	Airblast overpressure dB (LinPeak)	Ground Vibration (mm/s)	Allowable Exceedance				
		Residence on Privately owned land	120	10	0%				
			115	5	5% of total number of blasts over 12 months				
S3 C9	Blasting Hours	The Applicant must only carry out blasting on site between 7am and 5pm Monday to Saturday inclusive. No blasting is allowed on Sundays, public holidays, or at any other time without the written approval of the Planning Secretary.	Year to Date Blasting Records – 2020 Year to Date Blasting Records – 2021 Year to Date Blasting Records – 2022 Year to Date Blasting Records – 2023		Environment and Community Manager – all blasts occurred within permitted times		The detailed records show the time and dates for each blast. Samples of the blasting data confirms compliance.	Complies	
S3 C10	Blasting Frequency	The Applicant may carry out a maximum of: a) 3 blasts a day; and	Year to Date Blasting Records – 2020 Year to Date Blasting Records – 2021 Year to Date Blasting Records – 2022 Year to Date Blasting Records – 2023				The records maintained demonstrate that a maximum of two blasts have been made the site.	Complies	
		b) 12 blasts a week, averaged over a calendar year, at the site.	Year to Date Blasting Records – 2020 Year to Date Blasting Records – 2021 Year to Date Blasting Records – 2022 Year to Date Blasting Records – 2023				The number of blasts undertaken for each year are as follows: <ul style="list-style-type: none"> 2020 – 208, – max 4 per week (WML) 2021 - 224– max 4.3 per week WML) 2022 - 205 – max 0.3 per week 2023 – 64 blasts to the end of April, max 4 per week 	Complies	
	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, blasts misfires or blasts required to ensure the safety of the mine, its workers or the general public.							Noted	
S3 C11	Blasting Frequency	The Applicant must not carry out more than 1 blast a day within 500 metres of the Putty Road/ and or Golden Highway.			Environment and Community Manager – All blasts within 500m of Putty Rd / or Golden Highway require a road closure for the blast exclusion zone.		Blast exclusion maps 2020-2023 showing 300-500m exclusion zone. This identifies features that need management including public road closures, and infrastructure within 500m exclusion zone. -Weekly blast schedules – shows the likely road closures required for upcoming week. A sample of blast exclusion maps and weekly exclusion maps was reviewed that confirmed compliance with this requirement.	Complies	
S3 C12	Property Inspections	If the Applicant receives a written request from the owner of any privately-owned land within 2 kilometres of the approved open cut mining pit/s on site for a property inspection to establish the baseline condition of any buildings and/or structures on his/her land, or to have a previous property inspection updated, then within 2 months of receiving this request the Applicant must:			Environment and Community Manager- Nil baseline property inspections requested during the audit period		Not triggered, no baseline property inspections were triggered during the audit period.	Not Triggered	

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Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
S3 C12	Property Inspections	a) Commission a suitably qualified, experienced and independent person, whose appointment is acceptable to both parties to: <ul style="list-style-type: none"> establish the baseline condition of any buildings and other structures on the land, or update the previous property inspection report; and identify measures that should be implemented to minimise the potential blasting impacts of the project on these buildings and/or structures; and 		Environment and Community Manager- Nil baseline property inspections requested during the audit period		Not triggered, no baseline property inspections were triggered during the audit period.	Not triggered	
		b) give the landowner a copy of the new or updated property inspection report.		Environment and Community Manager- Nil baseline property inspections requested during the audit period		Not triggered, no baseline property inspections were triggered during the audit period.	Not triggered	
		c) If there is a dispute over the selection of the suitably qualified, experienced and independent person, or the Applicant or the landowner disagrees with the findings of the property inspection report, either party may refer to the Planning Secretary for resolution.	Email from DPE (A Hegarty) to Property Owner (263 Wambo Road Bulga title "referral to Secretary for Resolution of blast property investigation -263 Wambo Road dated 6 May Letter from DPE (H Watters) to Yancoal G Mulhearn titled " Mount Thorley, Warkworth Complex - SSD 6464 and SSD 6465 Property Investigation - Blasting dated "10 November 2021. Letter from DPE (A Hegarty) to Property Owner (263 Wambo Road Bulga title "Mount Thorley, Warkworth Complex - SSD 6464 and SSD 6465 Property Investigation - Blasting dated "21 March 2022 Letter from Bill Jordan and Associates titled "Residence at 263 Wambo Road Bulga, Assessment of possible blast vibration – addendum report dated 7 February 2022	Environment and Community Manager- Nil disputes with property owners have occurred during the audit period		One referral was made to the Planning Secretary during the audit period. An investigation was initiated by the Planning Secretary which required the preparation of an addendum report (to the original property condition inspection report) as well as the provision of vibration monitoring data. DPE wrote to the concerned property owner addressed the property owners concerns and concluded the 2019 report and addendum report were still valid and no further property investigations are required for blasting undertaken prior to 29 June 2019.	Not triggered	
S3 C13	Property investigations	If the owner of any privately-owned land claims that buildings and/or structures on his/her land have been damaged as a result of blasting on the site, then within 2 months of receiving this claim the Applicant must:		Environment and Community Manager- Nil new claims have been made during the audit period		No new claims have been made during the audit period	Not triggered	
		a) commission a suitably qualified, experienced and independent person, whose appointment is acceptable to both parties to investigate the claim; and		Environment and Community Manager- Nil new claims have been made during the audit period		No new claims have been made during the audit period	Not triggered	
		b) give the landowner a copy of the property investigation report.		Environment and Community Manager- Nil new claims have been made during the audit period		No new claims have been made during the audit period	Not triggered	
		c) If this independent property investigation confirms the landowner's claim, and both parties agree with these findings, then the Applicant must repair the damage to the satisfaction of the Planning Secretary. If there is a dispute over the selection of the suitably qualified, experienced and independent person, or the Applicant or the landowner disagrees with the findings of the independent property investigation, then either party may refer the matter to the Planning Secretary for resolution		Environment and Community Manager - there was one Secretary referral for a 2019 property investigation (Maizey property) this was determined to be for the same 2019 property investigation damage claim. This led to a Secretary referral for the previous 2019 claim. DPE letter to Maizey with outcome of referral provided 21 March 2022 which agreed with the findings of the original property investigation report from 2019.			Not triggered	

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Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
S3 C14	Operating Conditions Blasting	<p>During mining operations on site, the Applicant must:</p> <p>a) implement all reasonable and feasible measures 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; and • minimise the dust and fume emissions of any blasting; 	<p>Complaints Register Incident Register</p>	<p>Environment and Community Manager- Nil blast related incidents during the audit period</p>		<p>One hundred and sixty-two blast related complaints were received during the audit period. A review of the detailed complaints register indicated that those complaints were associated with blast noise and/or vibration, however no property damage was reported. One blasting incident was recorded during the audit period. No evidence of personal injuries or property damage were recorded during this audit period.</p>	Complies	
		<p>b) Ensure that blasting on the site does not damage historic heritage sites outside of the disturbance area including the Wambo Homestead, Bulga Bridge, St Phillips Church or the followings Aboriginal grinding groove sites:</p> <ul style="list-style-type: none"> • MTW-266-WSW-09-22; • MTW-267-WSW-09-22; • MTW-268-WSW-209-23; ad • Aboriginal grinding groove site Mt Thorley M 37-6-0162 (prior to its relocation). 	<p>Complaints Register Incident Register</p>	<p>Environment and Community Manager- Nil known damage during the audit period, noting that grinding groove M was relocated to avoid impact</p>		<p>One hundred and sixty-two blast related complaints were received during the audit period. A review of the detailed complaints register indicated that those complaints were associated with blast noise and/or vibration, however no property damage was reported. One blasting incident was recorded during the audit period. No evidence of personal injuries or property damage were recorded during this audit period.</p>	Complies	
		<p>c) minimise the frequency and duration of any road closures, and</p>	<p>Mount Thorley, Warkworth – Road Closure Checklist dated 18 April 2023 Mount Thorley, Warkworth – Road Closure Checklist dated 28 April 2023</p>	<p>Environment and Community Manager- the road closure record is a form kept by the road closure supervisor. The road closure form includes the start and stop time of the actual road closure. The Blast Weekly Schedule provides a forecast for the following week where a road closure may be required for the upcoming blasts. Sometimes road closures may be planned, but not enacted due to weather conditions for example.</p>		<p>Road closures are planned and managed, with a checklist kept of road closure activities.</p>	Noted	
		<p>d) operate a suitable system (including a hotline and website updates) to enable the public to get up-to-date information on the proposed blasting schedule on site.</p>	<p>Blast Management Plan, Mount Thorley Warkworth, Revision 5.2 dated 10/2/2023. MTW Website</p>			<p>Section 5.2.4 of the Blast Management Plan describes the process for public notification of the blasting schedule and includes the operation of a telephone update line and information posted on the MTW website.</p>	Complies	

Project Approval SSD 6464 Warkworth Continuation Project (Mod 2)								
Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
S3 C15	Operating Conditions Blasting	The Applicant must not undertake blasting on site within 500 metres of: (a) any public road; or (b) any land outside the site that is not owned by the Applicant, unless: • the Applicant has a written agreement with the applicable infrastructure authority or landowner to allow blasting to be carried out closer to the infrastructure or land, and the Applicant has advised the Department in writing of the terms of this agreement; or • the Applicant has: - demonstrated to the satisfaction of the Planning Secretary that the blasting can be carried out closer to the infrastructure or land without compromising the safety of people or livestock, or damaging buildings and/or structures; and - updated the Blast Management Plan to include the specific measures that would be implemented while blasting is being carried out within 500 metres of the road or land.	Blast Management Plan, Mount Thorley Warkworth, Revision 5.2 dated 10/2/2023	Environment and Community Manager - blasts have been conducted within 500m of Public Road from time to time during the audit period. Road closures are enacted in accordance with the Road Closure Management Plan. -At NOOP, blasts are conducted within 500m of infrastructure (Public Road (Golden Hwy), Ausgrid transmission lines). NOOP blast impact monitoring plan also undertaken and recorded. -Crown Land – MTW holds the grazing licence for this lot within 500m of WML		BMP includes approvals for road closures on the Council or TfNSW owned roads surrounding the mine in the BMP Appendix – Road Closure Management Plan.	Complies	
S3 C16	Blast Management Plan	The Applicant must prepare a Blast Management Plan for the development to the satisfaction of the Planning Secretary and carry out the development in accordance with this plan. This plan must:	Blast Management Plan, Mount Thorley Warkworth, Revision 5.2 dated 10/2/2023 Letter from Yancoal (G. Mulhearn) to EPA (N Ryan) titled “Yancoal, Mt Thorley Warkworth EPA Consultation on Noise, Air Quality Blasting and Water Management Plan” dated 18 July 2018				Complies	
		a) be prepared in consultation with the EPA, and submitted to the Planning Secretary for approval prior to carrying out any development under this consent;	Letter from EPA (N Ryan) to Yancoal (G Mulhearn) titled Environment Protection Licences 1376 and 1976 Environmental Management Plans” dated 19 July 2018 Independent Environmental Audit Report for Yancoal Mount Thorley Warkworth, Hansen Bailey, July 2020 Letter from DPE (J. Fittell) to Warkworth Mining Limited (G Mulhearn) titled “Approval of Warkworth Continuation Project Blast Management Plan” dated 24 March 2023			The blast management plan was updated during the audit period (administrative updates and approved on the 24 March 2023. DPE noted in their approval that consultation with the relevant parties (as detailed in this condition) was not required due to the administrative nature of the updates	Complies	
		b) describe the measures that would be implemented to ensure compliance with the blasting criteria and operating conditions of this consent;	Blast Management Plan, Mount Thorley Warkworth, Revision 5.2 dated 10/2/2023			Appendix D of the BMP	Complies	
		c) include a road closure management plan for blasting within 500 metres of a public road, that has been prepared in consultation with the RMS and Council;	Blast Management Plan, Mount Thorley Warkworth, Revision 5.2 dated 10/2/2023			Appendix D of the BMP	Complies	
		d) include a monitoring program for evaluating the performance of the development, including: • compliance with the applicable criteria; • avoiding any blasting impacts on the historic heritage items referred to in condition 12 above; and • minimising the fume emissions from the site.	Blast Management Plan, Mount Thorley Warkworth, Revision 5.2 dated 10/2/2023			Appendix E of the BMP	Complies	

Project Approval SSD 6464 Warkworth Continuation Project (Mod 2)									
Cond.	Title	Condition	Documents Reviewed		Interviews	Audit Inspections	Assessment	Finding	Recommendations
S3 C17	Air Quality Impact Assessment Criteria	Except for the land in Table 1, the Applicant must ensure that all reasonable and feasible avoidance and mitigation measures are employed so that particulate matter emissions generated by the development do not cause exceedances of the criteria listed in Tables, 5 6, and 7 at any residence on privately owned land.	Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023			Measures to minimise dust observed on site included the operation of water carts (Photograph 2), designated haul roads, rehabilitation of exposed areas (to provide ground cover and minimise dust generation), air monitoring, weather monitoring and stoppage of work (as reported in Annual Reviews) during unfavorable meteorological conditions	The Auditor's observations during the site inspection verified that the AQMP was being implemented. The 2021 Annual Review reported compliance with all short term and annual average air quality criteria. A total of 1,526 hours of mine stoppage was recorded following implementation of proactive and reactive measures to minimise dust and ensure compliance with air quality criteria. The 2021 Annual Review reported compliance with all short term and annual average air quality criteria. A total of 1,459 hours of mine stoppage was recorded following implementation of proactive and reactive measures to minimise dust and ensure compliance with air quality criteria. The 2022 Annual Review reported compliance with all short term and annual average air quality criteria with a total of 866 hours of mine stoppage recorded following pro-active and re-active measures to minimise dust and ensure air quality criteria.	Complies	
	Table 5	Pollutant	Averaging Period	Criterion					
		Total Suspended Solids (TSP) matter	Annual	90 ug/m ³					
		Particulate matter < 10um (PM ₁₀)	Annual	30 ug/m ³					
	Table 6	Pollutant	Averaging Period	Criterion					
Particulate matter < 10um (PM ₁₀)		24 Hour	50 ug/m ³						
Table 7	Pollutant	Annual	Max Increase	Max Total Dust Deposited					
	Deposited Dust		2 g/m2/month	4 g/m2/month					
S3 C18	Mine Owned Land	The Applicant must ensure that all reasonable and feasible avoidance and mitigation measures are employed so that particulate matter emissions generated by the development do not cause exceedances of the criteria listed in Tables 5, 6 and 7 at any occupied residence on mine-owned land (including land owned by another mining or petroleum company, unless and to the extent that:	Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023 Air Quality Management Plan, Mt Thorley Warkworth, Rev 4.1 dated 28 July 2022 Details (including relevant correspondence refer to parts a to d below) of any new tenants to mine owned land during this audit period.			Measures to minimise dust observed on site included the operation of water carts, designated haul roads, rehabilitation of exposed areas (to provide ground cover and minimise dust generation), air monitoring, weather monitoring and stoppage of work (as reported in Annual Reviews) during	The 2021 Annual Review reported compliance with all short term and annual average air quality criteria. A total of 1,526 hours of mine stoppage was recorded following implementation of proactive and reactive measures to minimise dust and ensure compliance with air quality criteria. The 2021 Annual Review reported compliance with all short term and annual average air quality criteria. A total of 1,459 hours of mine stoppage was recorded following implementation of proactive and reactive measures to minimise dust and ensure compliance with air quality criteria. The 2022 Annual Review reported compliance with all short term and annual average air quality criteria with a total of 866 hours of mine stoppage recorded following pro-active and re-active measures to minimise dust and ensure air quality criteria.	Complies	
S3 C18	Mine Owned Land	a) the tenant and landowner by another mining or petroleum company) have been notified of any health risks associated with such exceedances in accordance with the notification requirements under schedule 4 of this consent;	Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023				No exceedances of dust criteria were reported during the audit period.	Not Triggered	

Project Approval SSD 6464 Warkworth Continuation Project (Mod 2)								
Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
S3 C18	Mine Owned Land	b) the tenant of any land owned by the Applicant can terminate their tenancy agreement without penalty at any time, subject to giving reasonable notice and cause;		Environment and Community Manager – no tenants terminated their leases during the audit period.		Residential tenancy agreements provide details of early termination without penalty (Clause 18).	Not Triggered	
		c) air quality monitoring is regularly undertaken to inform the tenant or landowner (if the residence is owned by another mining or gas company) of the particulate emissions at the residence; and	Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023			No exceedances of dust criteria were reported during the audit period.	Not Triggered	
		d) data from this monitoring is presented to the tenant and landowner in an appropriate format for a medical practitioner to assist the tenant and landowner in making informed decisions on the health risks associated with occupying the property.	Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023			No exceedances of dust criteria were reported during the audit period.	Not Triggered	
S3 C19	Operating Conditions Air Quality	The Applicant must: a) implement all reasonable and feasible measures to minimise the: • odour, fume and dust emissions of the development; and • release of greenhouse gas emissions from the development;	Air Quality Management Plan, Mt Thorley Warkworth, Rev 4.1 dated 28 July 2022 Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023		During the site inspection, the Auditor observed water carts in operation. The auditor observed that minor levels of dust were being generated within the open cut, on haul roads, and in areas that were being stripped, although no evidence that dust was leaving the site at the time of the site inspection. Areas of the site have been cleared and progressive rehabilitation works are behind schedule. The Auditor also observed significant areas, that while not ready for final rehabilitation, would benefit from temporary stabilisation to help reduce dust emissions during adverse wind conditions.	Fifty-eight dust-related complaints were received during the audit period. No exceedances in dust criteria were reported during the audit period. Areas of the site are being cleared in preparation for mining, and the disposal of overburden is progressing. The planned progressive rehabilitation works are, however, behind schedule. The Auditor also observed areas, that while not ready for final rehabilitation, would benefit from temporary stabilisation to help reduce dust emissions during adverse wind conditions.	Non-compliant	Increase the rate of progressive rehabilitation works with the objective of meeting the established progressive rehabilitation targets. Prepare and implement a program for the stabilisation of unsealed / disturbed areas of the site including stockpiles, finished landforms, and disturbed areas that are not currently being actively worked / filled). The program should identify and classify all areas of the site that are currently disturbed according to the dust generation potential of those areas and establish clear targets for the stabilisation of those areas (either permanent or temporary) with the objective of meeting the requirements of the Blue Book.
		b) operate a comprehensive air quality management system that uses a combination of predictive meteorological forecasting and real-time air quality monitoring data to guide the day-to-day planning of mining operations and the implementation of both proactive and reactive air quality mitigation measures to ensure compliance with the relevant conditions of this consent;	Air Quality Management Plan, Mt Thorley Warkworth, Rev 4.1 dated 28 July 2022			The Air quality management plan describes the air quality management system and procedures including the predictive tools.	Complies	

Project Approval SSD 6464 Warkworth Continuation Project (Mod 2)								
Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
S3 C19	Operating Conditions	c) minimise the air quality impacts of the development during adverse meteorological conditions and extraordinary events (see note d to Tables 5-7 above); and	Air Quality Management Plan, Mt Thorley Warkworth, Rev 4.1 dated 28 July 2022 Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023		During the site inspection, the Auditor observed water carts in operation. The auditor observed that minor levels of dust were being generated within the open cut, on haul roads, and in areas that were being stripped, although no evidence that dust was leaving the site at the time of the site inspection. Significant areas of the site have been cleared and progressive rehabilitation works are behind schedule. The Auditor also observed significant areas, that while not ready for final rehabilitation, would benefit from temporary stabilisation to help reduce dust emissions during adverse wind conditions.	Fifty-eight dust-related complaints were received during the audit period. No exceedances in dust criteria were reported during the audit period. Areas of the site are being cleared in preparation for mining, and the disposal of overburden is progressing. The planned progressive rehabilitation works are, however, behind schedule. The Auditor also observed areas, that while not ready for final rehabilitation, would benefit from temporary stabilisation to help reduce dust emissions during adverse wind conditions.	Non-compliant	Increase the rate of progressive rehabilitation works with the objective of meeting the established progressive rehabilitation targets. Prepare and implement a program for the stabilisation of unsealed / disturbed areas of the site including stockpiles, finished landforms, and disturbed areas that are not currently being actively worked / filled). The program should identify and classify all areas of the site that are currently disturbed according to the dust generation potential of those areas and establish clear targets for the stabilisation of those areas (either permanent or temporary) with the objective of meeting the requirements of the Blue Book.
		d) co-ordinate the air quality management on site with the air quality management at nearby mines (including the Mt Thorley, Bulga, Wambo and Hunter Valley Operations mines) to minimise any cumulative air quality impacts	Air Quality Management Plan, Mt Thorley Warkworth, Rev 4.1 dated 28 July 2022 Inter mine meeting minutes dated 29 June 2023 Email from Yancoal (G Mulhearn) to Peabody Wambo Coal dated February 8 2023	Environment and Community Manager - interactions on day to day observations regarding emissions from other mines are typically done by phone call – not often required at inspection locations of CROs, as these inspections are close to MTW operations.		Section 3.2 describes how MTW coordinate air quality management with the neighbouring mines. Evidence of interaction and coordination was provided and included inter mine coordination meeting minutes.	Complies	
S3 C20	Air Quality Management Plan	The Applicant must prepare a detailed Air Quality Management Plan for the development to the satisfaction of the Planning Secretary, and carry out the development in accordance with this plan. This plan must: a) be prepared in consultation with the EPA, and be submitted to the Planning Secretary for Approval prior to carrying out any development under this consent;	Air Quality Management Plan, Mt Thorley Warkworth, Rev 4.1 dated 28 July 2022 Letter from Yancoal (G. Mulhearn) to EPA (N Ryan) titled "Yancoal, Mt Thorley Warkworth EPA Consultation on Noise, Air Quality Blasting and Water Management Pland" dated 18 July 2018 Letter from EPA (N Ryan) to Yancoal (G Mulhearn) titled Environment Protection Licences 1376 and 1976 Environmental Management Plans" dated 19 July 2018 Independent Environmental Audit Report for Yancoal Mount Thorley Warkworth, Hansen Bailey, July 2020 Letter from DPE (J Fittell) to Yancoal (G.Mulhearn) titled "Mt Thorley Continuation Project (SSD -6465) and Warkworth Continuation Project SSD (6464) dated 8 August 2022			The AQMP was updated during this audit period and approved by DPE on the 8th of August 2022. The EPA, in 2018 elected to not provide comments on the air quality management plan.	Complies	

Project Approval SSD 6464 Warkworth Continuation Project (Mod 2)								
Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
		b) describe the measures that would be implemented to ensure compliance with the relevant air quality criteria and operating conditions of this consent;	Air Quality Management Plan, Mt Thorley Warkworth, Rev 4.1 dated 28 July 2022 Independent Environmental Audit Report for Yancoal Mount Thorley Warkworth, Hansen Bailey, July 2020			Section 5 and 6 of the AQMP describes management and mitigation measures to ensure compliance with criteria	Complies	
S3 C20	Air Quality Management Plan	c) describe the project air quality management system;	Air Quality Management Plan, Mt Thorley Warkworth, Rev 4.1 dated 28 July 2022 Independent Environmental Audit Report for Yancoal Mount Thorley Warkworth, Hansen Bailey, July 2020			Section 5 and 6 of the AQMP	Complies	
		d) include provisions for keeping the local community informed about the operation of the air quality management system and monitoring programs, including regular briefings and a public information session within 6 months of the granting of this development consent;	Air Quality Management Plan, Mt Thorley Warkworth, Rev 4.1 dated 28 July 2022 Independent Environmental Audit Report for Yancoal Mount Thorley Warkworth, Hansen Bailey, July 2020			Section 8 of the AQMP	Complies	
		e) include an air quality monitoring program that: <ul style="list-style-type: none"> adequately supports the proactive and reactive air quality management system; evaluates and reports on: <ul style="list-style-type: none"> the effectiveness of the air quality management system; and compliance against the air quality operating conditions; and defines what constitutes an air quality incident, and includes a protocol for identifying and notifying the Department and relevant stakeholders of any air quality incidents; and 	Air Quality Management Plan, Mt Thorley Warkworth, Rev 4.1 dated 28 July 2022 Independent Environmental Audit Report for Yancoal Mount Thorley Warkworth, Hansen Bailey, July 2020			Section 7 and Appendix A of the AQMP describes the air quality monitoring program.	Complies	
		f) include a protocol that has been prepared in consultation with the owners of nearby mines (including the Mt Thorley, Bulga, Wambo and Hunter Valley Operations) to minimise the cumulative air quality impacts of these mines and the development.	Air Quality Management Plan, Mt Thorley Warkworth, Rev 4.1 dated 28 July 2022	Manager Environment and Community - Current version of the AQMP is v4.1 (approved 8/8/2022). Changes to the AQMP since the last audit have occurred for v4.0 (approved 20/7/21), which included the detail of the inter-site communications protocol.			Section 3.2 of the AQMP addresses cumulative impacts and the details of the site protocol	Complies
S3 C21	Meteorological Monitoring	For the life of the development, the Applicant must ensure that there is a meteorological station in the vicinity of the site that:	Monthly Maintenance Records – Charlton Ridge Met Station, 9 March 2021 Benchmark Monitoring Calibration Records for Solar Radiation, Relative Humidity, Wind Direction, Wind Speed and Type, Ambient Temperature, Rain Gauge and Wind Sensor		Weather Station	Calibration certificates confirm compliance with AS3580.	Complies	
		a) complies with the requirement in the Approved Methods for Sampling of Air Pollutant in New South Wales guidelines; and						
		b) is capable of continuous real-time measurement of temperature inversions in accordance with the NSW Industrial Noise Policy, unless a suitable alternative is approved by the Planning Secretary following consultation with the EPA.	Monthly Maintenance Records – Charlton Ridge Met Station, 9 March 2021			Monitoring records demonstrate that the met station provides real time continuous monitoring.	Complies	

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Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
S3 C22	Water Supply	The Applicant must ensure that is has sufficient water for all stages of the development, and if necessary, adjust the scale of mining operations to match its available water supply.	Water Management Plan, Mt Thorley Warkworth, Rev 5.2 dated 31 October 2021			There were no water supply issues during this audit period. Rainfall during this period was well above average. Section 6 of the water management plan provides details of water management activities to ensure adequate supply of water. This includes sources and security of water supply, water sharing with neighboring mines, off site water transfer and discharges.	Complies	
S3 C22A	Water Supply	The Applicant must report on water taken for each water source each year in the Annual Review	Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023			Table 6.12 of the Annual reviews provides details of the annual water balance including water inputs and outputs	Complies	
S3 C23	Compensatory Water Supply	The Applicant must provide a compensatory water supply to the owner of any privately-owned land whose basic landholder water rights as defined in the Water Management Act 2000 are adversely and directly impacted as a result of the development. This supply must be provided in consultation with NRAR, and to the satisfaction of the Planning Secretary. The compensatory water supply measures must provide an alternative long-term supply of water that is equivalent to the loss attributable to the development. Equivalent water supply should be provided (at least on an interim basis) as soon as practicable from the loss being identified, unless otherwise agreed with the landowner. If the Applicant 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 Planning Secretary for resolution. If the Applicant is unable to provide an alternative long-term supply of water, the Applicant must provide alternative compensation to the satisfaction of the Planning Secretary.		Environment and Community Manager – none were required during the audit period.		Compensatory water supplies were not required during the audit period	Not triggered	
S3 C24	Water Discharges	Unless an EPL or the EPA authorises otherwise, the Applicant must ensure that all surface water discharges from the site comply with the: a) discharge limits (both volume and quality) set for the development in any EPL; and	Annual Return (AR) Non-Compliance Detail Licence Number 1376, 01 Dec 2021 – 30 November 2022 (EPA Website) Annual Return Non-Compliance Detail Licence Number 1376, 01 Dec 2020 – 30 November 2021 (EPA Website) Annual Return Non-Compliance Detail Licence Number 1376, 01 Dec 2019 – 30 November 2020 (EPA Website)			The Annual Returns prepared for the Environment Protection Licence 1376 noted several non-compliances with this condition. Refer to audit schedule for EPL 1376 for details.	Non-compliant	A risk assessment and review of the storage capacity of the retention dams be undertaken that takes into account the increasing risk of extreme weather events, including extended duration wet weather patterns.
		b) relevant provisions of the POEO Act or Protection of the Environment Operations (Hunter River Salinity Trading Scheme) Regulation 2002	Annual Return (AR) Non-Compliance Detail Licence Number 1376, 01 Dec 2021 – 30 November 2022 (EPA Website) Annual Return Non-Compliance Detail Licence Number 1376, 01 Dec 2020 – 30 November 2021 (EPA Website) Annual Return Non-Compliance Detail Licence Number 1376, 01 Dec 2019 – 30 November 2020 (EPA Website)	Environment and Community Manager – no HRTS discharges during the audit period		No HRTS discharges occurred during the audit period	Complies	

Project Approval SSD 6464 Warkworth Continuation Project (Mod 2)								
Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
S3 C25	Water Transfers	The Applicant may receive water from, and transfer water to, the Mt Thorley mine, Hunter Valley Operations mine, Bulga mine and Redbank Power Station.	Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023 Water Management Plan, Mt Thorley Warkworth, Rev 5.2 dated 31 October 2021	Environment and Community Manager - Water sharing is noted in Water Management Plan, and in the EPLs for MTO and WML. MTO and WML are operated as a complex for water management. Agreements exist with HVO and Bulga Coal. Transfers are reported in the Annual Review reports. 2022 – 190ML transferred to Bulga Coal.		Noted, each Annual Review details water balances including external water sources	Noted	
S3 C26	Water Management Performance Measures	The Applicant must comply with the performance measures in Table 8 to the satisfaction of the Planning Secretary	Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023 Water Management Plan, Mt Thorley Warkworth, Rev 5.2 dated 31 October 2021		Photograph 4 Sediment Basin Photograph 5 Stabilised Drainage Channel			
		Feature	Performance Measure					
		Water management – General	Minimise the use of clean water (i.e. water not in contact with disturbed areas) on site Minimise the need for make-up water from external supplies (apart from permissible mine water transfers)		MTW operates and integrated water management system which includes clean and dirty water separation systems to minimise contact with disturbance systems.	This commitment is addressed in Sections 5.4-5.6, 7.4.2 and 8.4 WMP An annual water balance is undertaken that includes make up water from other sources.	Complies	
		Hunter River Alluvial Aquifer and Wollombi Brook Alluvial Aquifer	Negligible environmental consequences to the Hunter River alluvial aquifer and the Wollombi Brook alluvial aquifer beyond those predicted for the development			This commitment is addressed in Sections 5.4-5.6, 7.4.2 and 8.4 of the WMP. Groundwater monitoring locations have been established at the Hunter River alluvial aquifer and the Wollombi Brook alluvial aquifer. The results of the monitoring are summarized in section 6.7.6 of each Annual Return. Groundwater levels were reported as stable in both locations. There were some instances where groundwater levels increased	Complies	
		Lemington underground mine workings	During water transfers into the Lemington underground mine workings, retain a maximum fill level of 30m AHD in the Lemington underground mine workings or retain a buffer zone of 10m between the base of the Hunter River alluvium and the Lemington underground mine workings fill level; whichever gives the greater vertical separation	Environment and Community Manager - TW has not commenced water transfers to the Lemington underground mine workings and does not yet have infrastructure to do so. This will be incorporated into the WMP prior to commencing any water transfers to the Lemington underground mine workings		Not triggered as there has been no water transfers to the Lemington mine.	Not triggered	
		Construction and operation of infrastructure	Design, install and maintain erosion and sediment controls generally in accordance with the series Managing Urban Stormwater: Soils and Construction including Volume 1, Volume 2A – Installation of Services and Volume 2C – Unsealed Roads Design, install and maintain the infrastructure within 40 m of watercourses generally in accordance with the Guidelines for Controlled Activities on Waterfront Land (DPI 2007), or its latest version Design, install and maintain any creek crossings generally in accordance with the Policy and Guidelines for Fish Habitat Conservation and Management (DPI, 2013) and Why Do Fish Need To Cross The Road? Fish Passage Requirements for Waterway Crossings (NSW Fisheries 2003), or their latest versions	Community and Environment Manager - Design by WSP for sediment dams in 2020, including as built catchment review. -Design by WSP for sediment dams in 2023. Also included is a review by a CPESC–on the approach to sediment basin sizing in accordance with the blue book.	Erosion and Sediment controls including sediment dams, clean and dirty water diversions and rehabilitation activities (to provide groundcover and prevent erosion) were observed during the site inspection	This commitment is included in Table 5.1 of the WMP. Erosion and Sediment controls including sediment dams, clean and dirty water diversions and rehabilitation activities (to provide groundcover and prevent erosion) were installed WSP have undertaken catchments assessments and have designed in accordance with the Blue Book requirements, thus has been reviewed by a Certified Professional in Erosion and Sediment Control	Complies	
	Clean water diversion & storage infrastructure	Design, install and maintain the clean water system to capture and convey the 100 year ARI flood. Maximise as far as reasonable and feasible the diversion of clean water around disturbed areas on site			This commitment is included in Table 5.1 of the WMP. Clean water diversions were observed on site to prevent interaction with disturbed areas	Complies		

Project Approval SSD 6464 Warkworth Continuation Project (Mod 2)								
Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
		Sediment dams	Design, install and/or maintain the dams generally in accordance with the series Managing Urban Stormwater: Soils and Construction – Volume 1 and Volume 2E Mines and Quarries			This commitment is included in Table 5.1 of the WMP Sediment dams were installed and appeared to be maintained in accordance with the Blue Book	Complies	
S3 C26	Table 8	Mine water storages	Design, install and/or maintain mine water storage infrastructure to ensure no discharge of mine water off-site (except in accordance with condition 24) On-site storages (including mine infrastructure dams and treatment dams) are suitably designed, installed and/or maintained to minimise permeability Maintain adequate freeboard within the pit void at all times to minimise the risk of discharge to surface waters	Community and Environment Manager Dam 46N for WML 4/1/21. Outcome – Penalty Notice from DPE and EPA. -- New north drain installed to redirect catchment to alternate dam was completed in 2021. Discharge from CC5 sump for WML 4/7/22. Outcome – “Recorded by DPE”		This commitment is included in Table 5.1 of the WMP. There have been two incidents that resulted in the discharge of mine-water. The incident on 4/1/21 was from a water equipment park up area has spilled from a dam into a water course reporting into Wollombi Brook, the incident resulted penalty notices issued by both the DPE and EPA. In response to the Penalty notices, WML prepared an action plan which includes several actions relating to detailed engineering assessment, design and construction of civil infrastructure for improved surface water drainage infrastructure at WML North Pit North. Correspondence from DPE and WML confirms that the detailed design works for the North Pit North drainage improvements were completed in October 2021. The incident on 4/7/22 was reported as an overtopping event during a greater than design rainfall event. It was reported that samples were collected with no environmental harm caused. No further actions to prevent recurrence were proposed by WML.	Non-compliant	In relation to the incident on the 4/7/21, no further actions are recommended over and above the actions taken by WML in response to the incident. In response to the incident on the 4/7/22, it is recommended that a risk assessment and review of the storage capacity of the retention dams be undertaken that takes into account the increasing risk of extreme weather events, including extended duration wet weather patterns.
		Flood mitigation measures	Design, install and maintain flood mitigation measures along the western side of the development, to ensure there is adequate freeboard (at least 500mm) between the Probable Maximum Flood level in Wollombi Brook and the crest levee or peak of the flood mitigation infrastructure. Residual impacts downstream must be managed in an appropriate manner.	Community and Environment Manager - A 2016 flood study engaged by Singleton Council by BMT WBM identified the PMF (Extreme Flood) RL as 69.3m at Bulga Bridge, and 62.8m at Warkworth. Figure 9-5 on page 122 of the PDF flood report includes a figure of Design Flood Extents, including the PMF. It is only MTO that shows potential for flood extent reaching the pit. For WML the flood extent is some distance from the pit. Evidence has previously been sought from the BMT WBM that the Charlton Levee is RL 70.5m, and the corresponding PMF level of 70.0m exists in that area.		This commitment is included in Section 7.5.2 of the WMP BMT global (hydrologists) have reviewed the height of the flood level and have confirmed a 500mm freeboard exists between the PMF level and the height of the crest of the flood levee	Complies	
		Overburden emplacements	Design, install and maintain emplacements to encapsulate and prevent migration of tailings, acid forming and potentially acid forming materials, and saline and sodic material Design, install and maintain emplacements to prevent off-site migration of saline groundwater seepage	Incident Register		This commitment is addressed in Sections 5.4-5.6, 7.4.2 and 8.4 of the WMP. Incidents involving the release of tailings or acid forming materials were recorded for the audit period.	Complies	
		Chemical and hydrocarbon storage	Chemical and hydrocarbon products to be stored in bunded areas in accordance with the relevant Australian Standards		Appropriate bunding was provided around hydrocarbon storage tanks, other fuels and chemicals were observed to be stored in designated chemical storage containers	This commitment is included in Table 5.1 of the WMP. Appropriate bunding was provided around hydrocarbon storage tanks, other fuels and chemicals were observed to be stored in designated chemical storage containers	Complies	

Project Approval SSD 6464 Warkworth Continuation Project (Mod 2)								
Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
S3 C27	Water Management Plan	The Applicant must prepare a Water Management Plan for the development to the satisfaction of the Planning Secretary and carry out the development in accordance with this plan. The plan must:	Water Management Plan, Mt Thorley Warkworth, Rev 5.1 dated 31 October 2021 Letter from Yancoal (G. Mulhearn) to EPA (N Ryan) titled "Yancoal, Mt Thorley Warkworth EPA Consultation on Noise, Air Quality Blasting and Water Management Plan" dated 18 July 2018 Independent Environmental Audit Report for Yancoal Mount Thorley Warkworth, Hansen Bailey, July 2020			The Water Management Plan was revised in 2021.	Complies	
		a) be prepared in consultation with the EPA and DPE Water and submitted to the Planning Secretary for approval prior to carrying out any development under this consent; and	Letter from EPA (N Ryan) to Yancoal (G Mulhearn) titled Environment Protection Licences 1376 and 1976 Environmental Management Plans" dated 19 July 2018 Letter from Yancoal (G.Mulhearn) to DPE (M Sprott) titled "Mount Thorley Warkworth updated Water Management Plan" dated 20 December 2019 Letter from DPE (M Sprott) to Yancoal (G Mulhearn) titled "Mount Thorley Water Management Plan, dated 13 May 2020 Independent Environmental Audit Report for Yancoal Mount Thorley Warkworth, Hansen Bailey, July 2020			There were several revisions of the Water Management Plan approved by DPE during the audit period. These were: <ul style="list-style-type: none"> Version 4.4 (approved by DPE on the 13th of May 2020 Version 5.1 (approved by DPE on the 15 November 2021 The evidence of consultation provided in Appendix A of the WMP covers the previous versions of the plan. The EPA or DPE Water were not consulted during the preparation of the most recent version of the plan or that the plan has been approved by DPE. In their letter dated 20 December 2019, Yancoal requested the agreement of the Secretary to revise the plan without undertaking any consultation with the relevant parties. DPE confirmed the requirement to undertake consultation with DPE and NRAR prior to the next revision of the water management plan and include evidence of the consultation when submitting their revised document.	Complies	
		b) in addition to the standard requirements for management plans (see condition 3 of schedule 5), include a: <ul style="list-style-type: none"> (i) Site Water Balance that: <ul style="list-style-type: none"> includes details of: <ul style="list-style-type: none"> sources and security of water supply, including contingency planning for future reporting periods; water use and management on site, including details of water sharing between neighbouring mining operations; any off-site water transfers and discharges; reporting procedures, including the preparation of a site water balance for each calendar year; and the methodology used to quantify the annual groundwater inflow into the Lemington underground mine workings during the period water is to be stored and extracted, and the ongoing maximum annual groundwater inflow after these activities have ceased; and investigates and implements all reasonable and feasible measures to minimise water use on site; 	Water Management Plan, Mt Thorley Warkworth, Rev 5.1 dated 31 October 2021			Section 6 of the Water Management Plan provides details of water sources (inputs) and water uses (outputs) for the site. These figures have been used to design the water management system, including the sizing of sediment basins. Since 2018 (likely due to the effects of global warming and La Nina) there has an increase in the frequency and duration of extreme rainfall events, with 2022 one of the wettest years on record. There have been several instances where overtopping of sediment basins may have been due to larger than normal rainfall events resulting in exceedance of design criteria.	Complies	MTW review the water balance model to take into account the impacts of climate, for example the impacts of higher-than-normal rainfall events due to more extreme La-Nina events.

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Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
S3 C27	Water Management Plan	<p>(ii) Surface Water Management Plan, that includes:</p> <ul style="list-style-type: none"> • detailed baseline data on surface water flows and quality in the watercourses that could potentially be affected by the development; • a 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); and - mine water management systems including irrigation areas; • 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 coal reject materials; - 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 development: <ul style="list-style-type: none"> - mine water management system; - surface water quality of Loaders Creek; and - channel stability, stream and riparian vegetation health of Loaders Creek; • a program to monitor and report on: <ul style="list-style-type: none"> - the effectiveness of the mine water management system; and - surface water flows and quality, stream and riparian vegetation health in Loaders Creek potentially affected by the development; • a plan to respond to any exceedances of the performance criteria, and mitigate and/or offset any adverse surface water impacts of the development; and 	Water Management Plan, Mt Thorley Warkworth, Rev 5.1 dated 31 October 2021			<p>Sections 6,7 and 9 of the WMP.</p> <p>The Water management plan doesn't consider water treated and discharged from the site sewage treatment plant.</p>	Complies	That the WMP is updated to reflect water volumes and quality from the STP, as well as any necessary treatment and/or testing
		<p>(iii) Groundwater Management Plan, which includes:</p> <ul style="list-style-type: none"> • detailed baseline data on groundwater levels, yield and quality in the region, and privately-owned groundwater bores, that could be affected by the development; • groundwater assessment criteria, including trigger levels for investigating any potentially adverse groundwater impacts; • a program to monitor and report on: <ul style="list-style-type: none"> - groundwater inflows to the open cut pits; - the seepage/leachate from water storages, emplacements, backfilled voids, and final voids; - the impacts of the development 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 and riparian vegetation; o base flows to Loaders Creek; 	Water Management Plan, Mt Thorley Warkworth, Rev 5.1 dated 31 October 2021			Section 8 and 9 of the WMP	Complies	

Project Approval SSD 6464 Warkworth Continuation Project (Mod 2)								
Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
		<ul style="list-style-type: none"> a plan to respond to any exceedances of the groundwater assessment criteria; and a program to validate the groundwater model for the development. including an independent review of the model with every independent environmental audit, and compare the monitoring results with modelled predictions. 						
S3 C28	Biodiversity Retirement of Credits	Within 3 years of the date of commencement of development under this approval, the applicant will retire biodiversity credits of a class and number specified in Tables 9 and 10 below to the satisfaction of BCD.				DPE has yet to approve the retirement of biodiversity credits. However, it is acknowledged that some components such as the provision of supplementary measures (such as funding of research) have been met.	Non-compliant	As the retirement of requisite credits is now over 4 years overdue, it is recommended that negotiations with the Department/BCD/BCT to reach an agreeable solution are given priority
	Biodiversity Retirement of Credits	The retirement of these credits must be carried out in accordance with the NSW Biodiversity Offsets Policy for Major Projects and can be achieved by: (a) acquiring or retiring credits under the Biobanking Scheme in the TSC Act; (b) making payments into an offset fund that has been developed by the NSW Government; or (c) providing supplementary measures.				Refer to S3 C28	Noted	
S3 C28	Table 9	Vegetation Community	Code (BVT)	Biometric Vegetation Type	area	EEC		
		Warkworth Sands Woodland	HU872	Rough-barked Apple - Narrow-leaved Ironbark - Blakely's Red Gum - Bull Oak - Coast Banksia woodland on sands of the Warkworth area	72.12	Warkworth Sands Woodland in the Sydney Basin Bioregion EEC		
		Warkworth Sands Grassland	HU872	Rough-barked Apple - Narrow-leaved Ironbark - Blakely's Red Gum - Bull Oak - Coast Banksia woodland on sands of the Warkworth area	0.67	na		
		Central Hunter Grey Box - Ironbark Woodland	HU817	Narrow-leaved Ironbark - Bull Oak - Grey Box shrub - grass open forest of the central and lower Hunter	614.6	Central Hunter Grey Box-Ironbark Woodland in the New South Wales North Coast and Sydney Basin Bioregions EEC		
		Regenerating Central Hunter Grey Box - Ironbark Woodland	HU817	Narrow-leaved Ironbark - Bull Oak - Grey Box shrub - grass open forest of the central and lower Hunter	6.43	Central Hunter Grey Box-Ironbark Woodland in the New South Wales North Coast and Sydney Basin Bioregions EEC		
		Central Hunter Grey Box - Ironbark Derived Grassland	HU817	Narrow-leaved Ironbark - Bull Oak - Grey Box shrub - grass open forest of the central and lower Hunter	378.6	na		
		Central Hunter Ironbark - Spotted Gum - Grey Box Forest	HU818	Narrow-leaved Ironbark - Grey Box - Spotted Gum shrub - grass woodland of the central and lower Hunter	16.61	Central Hunter Ironbark-Spotted Gum-Grey Box Forest in the New South Wales North Coast and Sydney Basin Bioregions EEC		
	Table 10	Species	Credits Required					
Regent Honeyeater		18,929						
Southern Myotis		18,222						
Large eared Pied Bat		139						

Project Approval SSD 6464 Warkworth Continuation Project (Mod 2)									
Cond.	Title	Condition	Documents Reviewed		Interviews	Audit Inspections	Assessment	Finding	Recommendations
S3 C29	Rehabilitation Offsets	Within 10 years of the completion of mining operations under this consent, the Applicant must retire ecosystem credits of a number and class specified in Table 11 to the satisfaction of BCD.	SSD – 6464 MOD 2 Conditions of consent, dated 27 May 2022 Ecological Monitoring reports for Rehab areas for 2021 (Emergent Ecology/Dendra Systems) and 2022 (Emergent Ecology/Mosaic Ecology).				<p>The consent for SSD 6464 allows the applicant to carry out mining operations for 21 years on site from date of commencement of the development. As the date of commencement was 15 Feb 2016, mining operations may continue till 15 February 2037. Therefore, credits as per Table 11 must be retired before 15 Feb 2047 (i.e within 10 years of completion of the mining operations).</p> <p>While this consent condition is technically not yet triggered, rehab works will need to be conducted to a suitable standard to generate the requisite number of credits (though it is acknowledged at the mechanism for credit calculations is yet to be agreed upon).</p> <p>Ecological reports detail findings of monitoring of ecological works being conducted in rehab areas. While some criteria are meeting relevant targets, further works, particularly in areas in early phases of treatment, are required to meet long term targets to establish self-sustaining ecosystems.</p>	Not Triggered	<p>Recommendations to achieve targets, as detailed in the Ecological monitoring reports, include:</p> <p>More intensive weed control of High Threat Weeds;</p> <p>Control of overly dominant natives (e.g Corymbia maculate, Acacia species) via thinning or changes to seed mix; and</p> <p>Improved distribution of ground habitat features (such as logs);</p>
	Table 11	Vegetation Community	Code (BVT)	Biometric Vegetation Type	area	EEC			
		Central Hunter Grey Box - Ironbark Woodland	HU817	Narrow-leaved Ironbark - Bull Oak - Grey Box shrub - grass open forest of the central and lower Hunter	2,100	Central Hunter Grey Box-Ironbark Woodland in the New South Wales North Coast and Sydney Basin Bioregions EEC			
S3 C29	Rehabilitation Offsets	The retirement of these credits must be carried out in accordance with the NSW Biodiversity Offsets Policy for Major Projects and can be achieved by:(a) retiring credits generated by mine rehabilitation;(b) acquiring or retiring credits under the biobanking Scheme in the TSC Act;(c) making payments into an offset fund that has been developed by the NSW Government; or(d) providing supplementary measures.	SSD – 6464 MOD 2 Conditions of consent, dated 27 May 2022				<p>This consent condition is technically not yet triggered, as the credits from the rehab areas have to be generated within 10 years of completion of mining operations.</p> <p>It is acknowledged at the mechanism for credit calculations is yet to be agreed upon, in light of recent changes to biodiversity legislation and offset mechanisms.</p> <p>An agreement with the Department/BCD for calculations of credits from rehab areas in light of changes to biodiversity legislations and credit calculation methods, is yet to be reached.</p> <p>It is also noted that the NSW Biodiversity Offsets Policy for Major Projects and the Biobanking Scheme are no longer available due to changes to Biodiversity legislation</p>	Not Triggered	It is recommended that any future modification to the Approval consider seeking to remove specific mentions of the use of the NSW Biodiversity Offsets Policy for Major Projects as this is no longer available
S3 C30	Direct Land-based Offsets	Within 3 years of the date of commencement of the development under this consent, the Applicant must secure offset areas listed in Table 12 under an in-perpetuity conservation mechanism such as entering into a biobank agreement, in accordance with the relevant provisions of the TSC Act. The direct land-based offsets may be used as offsets for any approval required under the EPBC Act for this development.	SSD – 6464 MOD 2 Conditions of consent, dated 27 May 2022 Correspondence as cited for S3 C28		Onsite discussion with Yancoal environmental staff during site inspection on 26 Apr 2023	Inspections of Northern and Southern Biodiversity Areas.	<p>Date of commencement was 15 Feb 2016, therefore offset areas were to be secured under an in-perpetuity mechanism 14 February 2019 (i.e. within 3 years of commencement).</p> <p>Despite documentation/correspondence between WML, the Department and BCD since 2018, which has included submission of a modification application to DPE (SSD-6464 MOD1) to address securing of the offsets, this item remains incomplete. Actions are currently still being undertaken to reach an agreeable resolution with BCD and the department. However, no written correspondence between WML and the Department/BCD has been sited since the February 2022 correspondence.</p>	Non-compliant	As the securing of offset areas under an appropriate mechanism is now over 4 years overdue, it is recommended that negotiations with the Department/BCD/BCT to reach an agreeable solution are given priority

Project Approval SSD 6464 Warkworth Continuation Project (Mod 2)								
Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
	Table 12	Off Set Area	Minimum Size					
		Northern Biodiversity Area	303					
		Southern Biodiversity Area	705					
		Goulburn River Biodiversity Area	1,063					
		Bowditch Biodiversity Area	520					
		Putty Road Biodiversity Area	94					
		2003 Warkworth Sands Woodland Area	155.8					
		North Rothbury Biodiversity Area (Hanwood Estate)	40					
S3 C30A	Direct Land-based Off sets	The Applicant may subdivide the Northern Biodiversity Area in accordance with Figure 14A of Appendix 4 of this consent and with the requirements of the EP&A Act and EP&A Regulation, to allow for transfer of ownership of the remainder of the lot(s) to satisfy the requirements of MP 06_0261.		Discussion with Yancoal environmental staff during site inspection on 26 Apr 2023		No documents regarding subdivision of land sighted. However, subject re subdivision of Northern Biodiversity area mentioned by environmental staff during onsite inspection on 26 Apr 2023	Complies	
S3 C31	Direct Land-based Off sets	The Applicant may use the ecosystem and species credits generated by the establishment of an in perpetuity conservation mechanism such as a biobank agreement for all of these offset areas, apart from those credits generated for Putty Road Biodiversity Area and 2003 Warkworth Sands Woodland Area, to retire the biodiversity credit requirements of the development under Condition 28. All ecosystem and species credits generated by the establishment of an in-perpetuity conservation mechanism for the Putty Road Biodiversity Area and 2003 Warkworth Sands Woodland Area must be retired permanently upon the establishment of an in perpetuity conservation mechanism of these areas, and may not be used to retire any other credit requirements.	Warkworth Mine Biodiversity Management Plan (2018)	Environment and Community Manager - There is no time-based criteria and the condition states WML "may" use species credits apart from those generated from the Putty Road and WSW area. WML has not used credits from those areas		No in-perpetuity conservation mechanism currently in place for any of the offset areas	Noted	As the retirement of requisite credits is now over 4 years overdue, it is recommended that negotiations with the Department/BCD/BCT to reach an agreeable solution are given priority
S3 C32	Additional Warkworth Sands Woodland Measures	Within 6 months of the commencement of development under this consent, the Applicant must: (a) develop suitable performance criteria to the satisfaction of BCD for determining the successful regeneration of the Warkworth Sands Woodland EEC in the Northern Biodiversity Area within 15 years from the commencement of development under this consent; and	Northern Biodiversity Area Management Plan (V6, dated July 2022)	-	Parts of Northern Biodiversity Area, in particular Warkworth Sands Woodland areas inspected during site inspection on 25 Apr 2023	Reviewed Biodiversity Management Plan for the Northern Offset Area which includes Appendix B, that deals with performance criteria for Warkworth Sands Woodland regeneration. Criteria first provided in Ver 3 (dated August 2018) and retained in subsequent versions. Document approved by DPIE 20 July 2021. During the site inspection it was noted that while canopy and mid-story species are progressing well, groundcover in areas inspected had a low diversity of non-grass native species (e.g. herbs, forbs, ferns)	Complies	Additional work is required to meet the final performance criteria at the end of the 15-year period. In particular it is recommended that consideration is given to amending seed mixes to include a higher diversity of non-grass native species to increase groundcover diversity.
		(b) lodge a bond (in the form of a bank guarantee) of \$1 million (indexed to CPI) with BCD.	Independent Environmental Audit Report for Yancoal Mount Thorley Warkworth, Hansen Bailey, July 2020			Assessed as compliant by the 2020 audit which noted that evidence of the bond was provided and cited in previous audit periods.	Complies	
S3 C33	Additional Warkworth Sands Woodland Measures	If, at the end of 15 years from the commencement of development under this consent, the regeneration of Warkworth Sands Woodland EEC in the Northern Biodiversity Area meets the performance criteria to the satisfaction of BCD, the BCD must refund the bond to the applicant. If, however, the regeneration does not meet the performance criteria to the	Northern Biodiversity Area Management Plan (V6, dated July 2022)			Date of commencement of development was 15 Feb 2016 therefore this condition is not required to be fulfilled until 15 Feb 2031	Not Triggered	

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Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
		satisfaction of BCD, then the Applicant will forfeit the bond to BCD for use by BCD for the regeneration of Warkworth Sands Woodland EEC in the local area, or equivalent strategic conservation initiatives in the region.						
S3 C34	Additional Warkworth Sands Woodland Measures	Within 12 months of the commencement of the development under this consent, the Applicant must prepare an Integrated Management Plan for the Warkworth Sands Woodland EEC to the satisfaction of BCD. This plan must be prepared in consultation with the owners of Wambo and Bulga Mines, and outline the measures that would be implemented to coordinate management and recovery efforts for the EEC.	Warkworth Sands Woodland Integrated Management Plan (2017) Warkworth Sands Woodland Integrated Management Plan (2018) Email correspondence between Bill Baxter (Yancoal), Steven Cox (BCD), Robert Gibson (BCD) and Jessica Blair (Yancoal) between 24 Apr 2020 and 20 Oct 2020			Correspondence sighted confirmed that BCD had received the WSW IMP as submitted by WML. Correspondence from BCD confirmed that the review of the 2018 IMP was largely complete. However no subsequent correspondence sighted and no correspondence/documentation provided regarding approval of WSW IMP provided. It is noted that the WSW IMP has been prepared and provided to BCD. Non-compliance is mainly due to the document not yet being approved by BCD (i.e not approved within 12 months of the commencement of the development.	Non-compliant	Work with BCD to progress the outstanding approval as a high priority.
S3 C35	Additional Warkworth Sands Woodland Measures	Within 6 months of the commencement of development under this consent, the Applicant must contribute \$1 million to BCDs Saving Our Species - Regent Honeyeater conservation program. The Contribution may be used as a supplementary measure for any approval required under the EPBC Act for this development.	Independent Environmental Audit Report for Yancoal Mount Thorley Warkworth, Hansen Bailey, July 2020 Service level agreement document between OEH and Taronga Conservation Society Australia regarding payment of \$1 million from Warkworth Mining developer contributions for Regent Honeyeater recovery actions			2020 Audit confirmed that the MTW Regent Honeyeater Conservation Program internal proposal was viewed and that no date requesting payment contribution be made prior to 15/8/16. As per 2017 audit, money was sent and collected. PO raised 6/7/16. Sighted Service level agreement between OEH and Taronga Conservation Society for developer contributions (\$1 million) for Regent Honeyeater Recovery Actions	Complies	
S3 C36	Biodiversity Management Plan	The Applicant must prepare a Biodiversity Management Plan for the development to the satisfaction of the Planning Secretary, and carry out the development in accordance with this plan. The Plan must:	Warkworth Mine, Biodiversity Management Plan, Yancoal Warkworth Mine, Revision 6, NSW September 2018 Southern Biodiversity Management Plan, Revision 6, July 2022 Northern Biodiversity Management Plan, Revision 6, July 2022 Warkworth Sands Woodlands, Integrated Management Plan, Revision 1 15 February 2017 Bowditch Management Plan, Revision 3, July 2022 North Rothbury, Biodiversity Management Plan, Revision 3, July 2022 Putty Management Plan, Revision 3 July 2022 Goulburn River Management Plan, Revision 3 July 2022 Seven Oaks Management Plan, Revision 3, 27 July 2022 Condon View Management Plan Version 4, July 2022 Independent Environmental Audit Report for Yancoal Mount Thorley Warkworth, Hansen Bailey, July 2020 Letter from DPE (M Sprott) to Warkworth Mining Limited (G Mulhearn) titled "Biodiversity Management Plans for Mt Thorley Continuation Project (SSD 6464 and Warkworth Continuation Project SSD 6464)" dated 12 August 2022			Assessed as compliant by the 2020 audit which noted that DPE approved the plan on the 20 th of September 2018 Biodiversity Management Plans have been reviewed and resubmitted to DPE for approval. On 12 August 2022, DPE approved the following Biodiversity Area Management Plans - Southern Biodiversity Area Management Plan – Version 6 - Northern Biodiversity Area Management Plan – Version 6 - Bowditch Biodiversity Area Management Plan – Version 3 - Condon View Biodiversity Area Management Plan – Version 4 - Goulburn River Biodiversity Area Management Plan – Version 3 - North Rothbury Biodiversity Area Management Plan – Version 3 - Putty Area Management Plan – Version 3 - Seven Oaks Biodiversity Area Management Plan Version 3	Complies	

Project Approval SSD 6464 Warkworth Continuation Project (Mod 2)								
Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
		(a) be prepared in consultation with BCD and submitted to the Planning Secretary for approval prior to the commencement of any development under this consent;	Warkworth Mine, Biodiversity Management Plan, Yancoal Warkworth Mine, Revision 6, NSW September 2018 Independent Environmental Audit Report for Yancoal Mount Thorley Warkworth, Hansen Bailey, July 2020			Assessed as compliant by the 2020 audit which noted that DPE approved the plan on the 20 th of September 2018. Attachment B of the plan provides evidence of consultation with OEH. DPE have approved amendments to the Plan as noted in SC36 (above)	Complies	
S3 C36	Biodiversity Management Plan	(b) describe the short, medium and long term measures that would be implemented to: - manage the remnant vegetation and fauna habitat on the site; - implement the biodiversity offset strategy described in the EIS; - regenerate and conserve Warkworth Sands Woodland EEC in the biodiversity areas; - integrate the implementation of the biodiversity offset strategy to the greatest extent practicable within the rehabilitation of the site;	Warkworth Mine, Biodiversity Management Plan, Yancoal Warkworth Mine, Revision 6, NSW September 2018 Independent Environmental Audit Report for Yancoal Mount Thorley Warkworth, Hansen Bailey, July 2020			Assessed as compliant by the 2020 audit which noted that short term measures are described in Section 4 of the WML Biodiversity Management Plan, with long term measures provided in each Operations Management Plan for offset sites	Complies	
		(c) include detailed performance and completion criteria for evaluating the performance of the biodiversity offset strategy (including the regeneration of Warkworth Sands Woodland) and triggering remedial action if necessary;	Independent Environmental Audit Report for Yancoal Mount Thorley Warkworth, Hansen Bailey, July 2020			Assessed as compliant by 2020 audit, provided in Section 3.3.2 for operational lands (mine rehabilitation) and Section 4 for biodiversity offset areas. Trigger, response and remedial actions provided in Attachment A. Specific performance criteria also given in each OMP	Complies	
		(d) include a detailed description of the measures that would be implemented over the next 3 years for: - regenerating Warkworth Sands Woodland in the biodiversity offset areas; - protecting vegetation and fauna habitat outside the approved disturbance area on-site; - enhancing the quality of existing vegetation and fauna habitat on the site and in the biodiversity offset areas; - minimising clearing and avoid unnecessary disturbance; - maximising the salvage of resources within the approved disturbance area - including vegetative and soil resources - for beneficial use in the enhancement of any land based offsets or the rehabilitation of the site; - collecting and propagating seed; - minimising the impacts on fauna on-site, including undertaking pre-clearance surveys; - managing salinity using best practise dryland salinity management revegetation measures; - controlling weeds and feral pests; - controlling erosion; - managing grazing and agriculture on site; - controlling access; and - bushfire management.	Independent Environmental Audit Report for Yancoal Mount Thorley Warkworth, Hansen Bailey, July 2020			Assessed as compliant by 2020 Audit. Measures are described included in Sections 1,3,4,5 and Table 17	Complies	

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Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
S3 C36	Biodiversity Management Plan	(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; and				Assessed as compliant by 2020 Audit, summarised in Section 3.3.2.3 and Section 4.2.3 of BMP.	Complies	
		(f) identify the potential risks to the successful implementation of the biodiversity offset strategy (including regeneration of the Warkworth Sands Woodland), and to include a description of the contingency measures that would be implemented to mitigate these risks; a				Assessed as compliant by 2020 Audit. Risk assessment and corrective actions to mitigate these risks are provided in Section 6 of each OMP.	Complies	
		(g) include details of who would be responsible for monitoring, reviewing, and implementing the plan.				Assessed as compliant by 2020 Audit. Provided in Section 1.3.3 of the WMP BMP	Complies	
S3 C37	Conservation Bond	Within 3 months of the approval of the Biodiversity Management Plan, unless otherwise agreed by the Planning Secretary, the Applicant must lodge a Conservation Bond with the Department to ensure that the biodiversity offset strategy is implemented in accordance with the performance and completion criteria of the Biodiversity management Plan.	Letter from Deutsche Bank (A.G) to Department of Planning titled "Guarantee Number 802/GTE/7738" dated 29 July 2016 Commonwealth Bank – Bank Guarantee Number 600578461 dated 4 September 2017 Letter from DPE (S Brooks) to Principal Advisor "Offsets" Coal and Allied titled " Warkworth Mine – Time Extension for the submission of the conservation bond as required by Condition 11 Schedule 5 of DA 300-9-2001 (i) MTW 2017 Independent Environmental Audit, 2017 Independent Audit Report, Jacobs, 8 August 2018			Assessed as compliant by the 2020 Audit, noting bank guarantee number 802/GTE/7738 dated 29 July 2016 sighted for proposed conservation bond and acknowledged as appropriately calculated by DP&E dated 10/5/16.	Complies	
		The sum must be determined by: (a) calculating the full cost of implementing the biodiversity offset strategy (other than land acquisition costs); and	Letter from DPE (W.Jones) to Principal Advisor "Offsets" Coal and Allied titled "Approval of the Warkworth SSD 6464 Conservation Bond Calculation.			DPE approved the calculation of the biodiversity offsets to the value of \$ 3971,961) for the first year period on the 10 th of May 2016.	Complies	
		(b) employing a suitably qualified quantity surveyor to verify the calculated costs, to the satisfaction of the Planning Secretary. If the offset strategy is completed generally in accordance with the completion criteria in the Biodiversity Management Plan to the satisfaction of the Planning Secretary, the Planning Secretary will release the bond. If the offset strategy is not completed in accordance with the completion criteria in the Biodiversity Management Plan, the Planning Secretary will call in all, or part of, the conservation bond, and arrange for the satisfactory completion of the relevant works.	Letter from DPE (W.Jones) to Principal Advisor "Offsets" Coal and Allied titled "Approval of the Warkworth SSD 6464 Conservation Bond Calculation			Assessed as compliant by the 2017 audit. No specific documentation in relation to the Conservation Bond sighted in current audit period. However prior audit period sighted Bank Guarantee number 802/GTE/7738 dated 29 July 2016 for proposed conservation bond and acknowledged as appropriately calculated by DP&E dated 10/5/16	Complies	

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Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
S3 C38	Heritage Wollombi Brook Aboriginal Cultural Heritage Conservation Area	The Applicant must prepare a conservation Management plan for the Wollombi Brook Aboriginal Cultural Heritage Conservation Area to the satisfaction of the Planning Secretary and carry out the development in accordance with this plan. The plan must: (a) be prepared in consultation with BCD and aboriginal stakeholders, and submitted to the Planning Secretary for approval prior to any development to the west of Wallaby Scrub Road under this consent unless otherwise agreed by the Planning Secretary;	Wollombi Brook Aboriginal Cultural Heritage Conservation Area Plan of Management 2017 – 2021 Letter from DPE (H.Reed) to Yancoal (A Speechly) titled "Mount Thorley Warkworth Operations (SSD 6464 and SSD 6465) Approval of Management Plans dated 11 October 2017 Independent Environmental Audit Report for Yancoal Mount Thorley Warkworth, Hansen Bailey, July 2020			Assessed as compliant by the 2020 Audit. The Department approved the Management Plan on the 11 th of October 2017 noting the Department is satisfied they meet the relevant criteria under SSD 6464 and 6465.	Complies	
		(b) describe the measures that would be implemented to provide for the protection, conservation and enhancement of aboriginal values in the area;	Wollombi Brook Aboriginal Cultural Heritage Conservation Area Plan of Management 2017 – 2021 Independent Environmental Audit Report for Yancoal Mount Thorley Warkworth, Hansen Bailey, July 2020			Assessed as compliant by the 2020 Audit, Measures are outlined in Section 4.2, 7 and 10.2 of the Wollombi Brook ACHCA	Complies	
		(c) include a program/procedures for: - protection and management of aboriginal sites, including protocols for the establishment of strictly controlled non-access zones and protocols around culturally sensitive areas; - maintaining and managing access to the area by the relevant Aboriginal stakeholders, including establishment of areas for active Aboriginal cultural heritage and landscape management; and - ongoing consultation and involvement of the relevant Aboriginal stakeholders in the conservation and management of Aboriginal cultural heritage in the area.	Wollombi Brook Aboriginal Cultural Heritage Conservation Area Plan of Management 2017 – 2021 Independent Environmental Audit Report for Yancoal Mount Thorley Warkworth, Hansen Bailey, July 2020			Assessed as compliant by the 2020 Audit, Program and procedures are outlined in Section 7, 3, 5 and 5 of the Wollombi Brook ACHCA	Complies	
		(d) investigate the potential for collaborative management of the Aboriginal heritage values of the land within the Southern Biodiversity Area and the adjoining Wambo-owned land adjacent to the conservation area, in consultation with the owner of the Wambo mine; and	Wollombi Brook Aboriginal Cultural Heritage Conservation Area Plan of Management 2017 – 2021			Assessed as compliant by the 2020 Audit. Provided in Section 4.2.2 and 5 of the Wollombi Brook ACHCA.	Complies	
		(e) include an action plan for the implementation of the plan, including establishment and ole of the Wollombi Brook Aboriginal Cultural Heritage Conservation Area management committee in overseeing implementation of the plan.				Assessed as compliant by the 2020 Audit. Provided in Section 8 of the Wollombi Brook ACHCA.	Complies	
S2 C39	Heritage Wollombi Brook Aboriginal Cultural Heritage Conservation Area	Prior to carrying out any development to the west of Wallaby Scrub Road under this consent, unless the Planning Secretary agrees otherwise, the Applicant must enter into a conservation agreement or agreements pursuant to section 69B of the National Parks and Wildlife Act 1974 relating to the Wollombi Brook Aboriginal Cultural Heritage Conservation Area, recording the obligations assumed by the Applicant under the conditions of this consent in relation to the conservation area, and register the agreement/s pursuant to section 69F of the National Parks and Wildlife Act 1974.	Conservation Agreement for Wollombi Brook Aboriginal Cultural Heritage Conservation Area dated 3 November 2022 Letter from DPE (S'ODonoghue) to Yancoal (G Mulhearn) titled Warkworth Continuation Project, SSD (6464) Security of the Wollombi Brook Aboriginal Cultural Heritage Area Independent Environmental Audit Report for Yancoal Mount Thorley Warkworth, Hansen Bailey, July 2020			On 14 July 2022, DPE approved the commencement of limited mining activity prior to the final executed agreements. The final Conservation Agreement was signed on November 3 2022. Assessed as compliant by 2020 audit	Complies	

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Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
S3 C40	Human Remains	This consent does not allow the Applicant to disturb any in-situ human remains on site.	Please confirm that no in-situ remains have been encountered or disturbed.	Environment and Community Manager – no in situ human remains encountered during the audit period			Complies	
S3 C41	Protection of Heritage Items	Applicant must protect the heritage items identified in Table 1 of Appendix 5.	Salvage Reports Care Agreement			Salvage reports and the Care Agreement have been sighted by the Auditor and confirm that MTW has managed indigenous heritage issues in accordance with the requirements of the management plan.	Complies	
S3 C42	Salvage	Prior to carrying out any development on site that could affect the heritage items identified in Table 2 of Appendix 5, the Applicant must salvage those items in accordance with the approved program under the Aboriginal Heritage Management Plan.	Mount Thorley Warkworth Aboriginal Heritage Management Plan 2020, Compliance Audit Inspection, Arrow Heritage Solutions dated February 2021 Mount Thorley Warkworth Aboriginal Heritage Management Plan 2021, Compliance Audit Inspection, Arrow Heritage Solutions West of Wallaby Scrub Road Aboriginal Scar Tree Removal Program, Arrow Heritage Solutions, January 2023			Arrow Heritage Solutions undertook compliance inspections in 2020, 2021, 2022 and noted that no unauthorised site disturbances or AHMP non compliances were observed during the site inspections. A further compliance inspection is planned for 2023. Arrow Heritage have also been retained to provide ongoing heritage advice to the project and were engaged to manage and supervise the removal of three Aboriginal Scarred trees. Arrow Heritage reported the scarred trees were removed from site with care and transported to the Mount Thorley Warkworth Cultural Heritage Facility at 1916 Putty Road, where they have been cleaned and curated. Once decisions have been made regarding their long term storage location, the trees will be transported to this site where they will be managed according to the desires of the Cultural Heritage Working Group	Complies	
S3 C43	Aboriginal Heritage Management Plan	The Applicant must prepare an Aboriginal Heritage Management Plan for the development to the satisfaction of the Planning Secretary and carry out the development in accordance with this plan. The plan must:	Aboriginal Heritage Management Plan Mt Thorley Warkworth SSD 6464 and 6465 dated 27 July 2022			Further review of the plan was undertaken during the audit period with the Department approving Revision 4 of the plan on the 12 th of August 2022.	Complies	
		a) be prepared in consultation with Heritage NSW and Aboriginal stakeholders. and submitted to the Planning Secretary for approval prior to carrying out any development under this consent;	Letter from DPE (J Fittell) to Warkworth Mining (G Mulhearn) titled "Aboriginal Heritage Management Plan for Mount Thorley Continuation Project (SSD 6465) and Warkworth Continuation Project (SSD 6464) dated 12 th August 2022			A summary of the consultation undertaken is provided in Section 2 of the plan. Detailed consultation records with Heritage NSW and Aboriginal Stakeholders are provided in Schedule 18. DPE approved Revision 4 of the Plan on the 12 th of August 2022	Complies	
		b) include a program to: <ul style="list-style-type: none"> salvage, investigate and/or manage Aboriginal sites and potential archaeological deposits within the project disturbance area; assess and remove scarred trees within the disturbance area; protect and monitor Aboriginal sites outside the project disturbance area; manage the discovery of any new Aboriginal objects or skeletal remains during the development; facilitate access to archaeological sites on site for Aboriginal stakeholders; and Aboriginal stakeholders are consulted and involved in the conservation and management of Aboriginal cultural heritage on the site. 	Aboriginal Heritage Management Plan Mt Thorley Warkworth SSD 6464 and 6465 dated 27 July 2022			The AHMP includes a program for the protection and where required salvage of heritage artifacts.	Complies	

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Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
S3 C43	Aboriginal Heritage Management Plan	c) Include a research program, that has been prepared by suitable qualified and experienced persons whose appointment has been approved by the Planning Secretary, for locating and evaluating sand bodies of likely early Pleistocene and early Holocene age that may contain evidence of Aboriginal habitation in the Upper Hunter Valley.	Aboriginal Heritage Management Plan Mt Thorley Warkworth SSD 6464 and 6465 dated 27 July 2022			The Hunter Valley Sand Bodies Research Program is referenced in Section 38 of the AHMP and is provided in Schedule 17 of that Plan.	Complies	
S3 C44	Mount Thorley Warkworth Historic Heritage Conservation Fund	The Applicant must establish and contribute \$500,000 under the Mount Thorley Warkworth Historic Heritage Conservation Fund in consultation with Council and the CHAG to the satisfaction of the Planning Secretary.	Partnering Agreement, Mount Thorley, Warkworth Historic Heritage Conservation Fund, Warkworth Mining Limited dated 21 February 2017 Mt Thorley, Warkworth Historic Heritage Fund, Income and Expenditure Statement (as at 31 March 2023) Letter from Singleton Council (A. Schaffer) to Yancoal titled "Annual Reporting Requirement 2022 – Mount Thorley Warkworth Historic Heritage Conservation Fund" dated 18 April 2023			The income and expenditure statement notes that a total of \$516, 321.46 has been paid to the conservation fund (adjusted for inflation) with \$106,844 paid in 2023	Complies	
S3 C45	Mount Thorley Warkworth Great Northern Road Conservation Fund	The Applicant must establish and contribute \$200,000 under the Mount Thorley Warkworth Great Northern Road Conservation Fund to be administered by the Applicant in consultation with Council, CHAG, Convict Trail Project and Heritage Branch, to the satisfaction of the Planning Secretary.	Independent Environmental Audit Report for Yancoal Mount Thorley Warkworth, Hansen Bailey, July 2020			Assessed as compliant by 2020 audit which noted that a total of \$203k had been paid to the Convict Trail Project	Complies	
S3 C46	Historic Heritage Management Plan	The Applicant must prepare a Historic Heritage Management Plan for the development to the satisfaction of the Planning Secretary, and carry out the development in accordance with this plan. This plan must:	Historic Heritage Management Plan, Mount Thorley, Warkworth, Revision 2 dated 12 August 2022 Letter from DPE (H.Reed) to Yancoal (A Speechly) titled "Mount Thorley Warkworth Operations (SSD 6464 and SSD 6465) Approval of Management Plans dated 11 October 2017 Letter from DPE (J Fittell) to Warkworth Mining (G Mulhearn) titled "Historic Heritage Management Plan for Mount Thorley Continuation Project (SSD 6465) and Warkworth Continuation Project (SSD 6464) dated 12 th August 2022			The Department approved the Management Plan on the 11 th of October 2017 noting the Department is satisfied they meet the relevant criteria under SSD 6464 and 6465. Further review of the plan was undertaken during the audit period with the Department approving Revision 2 of the plan on the 12 th of August 2022.	Complies	
		(a) be prepared by suitable qualified and experienced persons whose appointment has been endorsed by the Planning Secretary;	Historic Heritage Management Plan, Mount Thorley, Warkworth, Revision 2 dated 12 August 2022	Environment and Community Manager - The original HHMP was prepared by the appropriate personnel appointed by DPE in 2016 (Dr David Cameron and Joel Deacon). As this update was minor in nature, and the management measures agreed upon are unchanged from the originally approved HHMP, MTW environmental personnel prepared and submitted the updated HHMP for DPE approval. In addition, as the changes were minor, in correspondence with the submission it was requested that consultation with relevant parties is not required, with existing consultation already included in the HHMP.		The original (2017) HHMP was prepared by an expert who was approved by DPE on 14 November 2016. The current version of the plan does not identify the author. The plan was revised in 2022. No evidence was available to verify that the author of those changes was DPE approved, if any consultation was undertaken during the revision process or is DPE has reviewed and approved the current revision.	Complies	
		(b) be prepared in consultation with the Heritage Branch, Council, CHAG and local historical organisations;	Historic Heritage Management Plan, Mount Thorley, Warkworth, Revision 2 dated 12 August 2022		Complies			
(c) be submitted to the Planning Secretary for approval prior to carrying out any mining to the west of Wallaby Scrub Road;	Historic Heritage Management Plan, Mount Thorley, Warkworth, Revision 2 dated 12 August 2022	Complies						

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Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
S3 C46	Historic Heritage Management Plan	<p>(d) Include the following:</p> <ul style="list-style-type: none"> - conservation management plans for the former RAAF Base Bulga, Great Northern Road (Wallaby Scrub Road portion), Brick House and Springwood Homestead, and - a program/procedures for: <ul style="list-style-type: none"> - archaeological investigations of Wallaby Scrub Road, Well 2, and the former RAAF Base Bulga Complex; - photographic recording of all historic heritage sites within the disturbance areas prior to disturbance; - relocation and storage of moveable heritage items; - managing the discovery of any new heritage items during the development; - ongoing consultation and involvement of the relevant historical groups in the conservation and management of historic heritage on the site; - developing an interpretation programme of the heritage values of the RAAF Base Bulga Complex and the Great Northern Road Complex; - establishing the Mount Thorley Warkworth Historic Heritage Conservation Fund and the Mount Thorley Warkworth Great Northern Road Conservation Fund; and - protecting the other heritage items outside the disturbance area. <p>Note: It is accepted that the conservation Management plan for the Springwood Homestead and interpretation programme for the RAAF Base Bulga Complex and the Great Northern Road Complex will not be submitted with the initial Historic Heritage Management Plan. These should be progressively added to the plan once completed.</p>	Historic Heritage Management Plan, Mount Thorley, Warkworth, Revision 2 dated 12 August 2022			As above	Complies	
S3 C47	Transport Wallaby Scrub Road	<p>This consent allows open cut mining through the existing alignment of Wallaby Scrub Road.</p> <p>Note: the Applicant also required other related approvals in order to undertake mining within the existing road alignment including an approval under the Roads Act 1993 to close Wallaby Scrub Road. It also needs to obtain mining lease over the Road under the Mining Act 1992 for mining from surface to 20 metres depth.</p>	Independent Environmental Audit Report for Yancoal Mount Thorley Warkworth, Hansen Bailey, July 2020			Assessed as compliant by 2020 Audit which noted a portion of Wallaby Scrub Road was gazetted as closed by the Minister for Lands and Forestry on 7 September 2018, and subsequently purchased from Singleton Shire Council (SSC) on the same date (Section 4.4, 2018 AR). No Section 138 approval under the Roads Act 1993 was required as the parcel of land was no longer a road after the gazettal of road closure (GM pers comms).	Complies	
S3 C48	Intersections	<p>Unless the Planning Secretary agrees otherwise, the Applicant must:</p> <p>(a) close the intersection of Lydes Lane and the Golden Highway in consultation with Council and to the satisfaction of TfNSW, within 6 months of the date of this consent; and</p>	Please advise status of road closure and provide evidence of consultation with Council Independent Environmental Audit Report for Yancoal Mount Thorley Warkworth, Hansen Bailey, July 2020			Assessed as compliant by 2020 Audit which noted that Lydes Lane was physically closed in 2016 with appropriate consultation with Council and no objection from TfNSW.	Complies	
		<p>(b) pay the TfNSW\$375,000 towards the upgrade of the intersection of the Golden Highway (Putty Road) and Mitchel Line of Road within 12 months of the date of this consent.</p>	Independent Environmental Audit Report for Yancoal Mount Thorley Warkworth, Hansen Bailey, July 2020			Assessed as compliant by 2020 Audit which noted that payments were completed in 2017.	Complies	

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Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
S3 C49	Putty Road Crossing	If the Applicant decides to construct a third crossing of Putty Road between the Warkworth and Mount Thorley Mines, then this crossing must be constructed to the satisfaction of the RMS, and the Applicant must bear all the costs associated with the construction, maintenance and subsequent removal of this crossing during rehabilitation of the site.	Assessed as compliant by 2020 Audit.	Environment and Community Manager – all three crossings have been completed		Assessed as compliant by 2020 Audit. Construction activities were completed in 2018 including the Putty Road third crossing.	Complies	
S3 C50	Rural Fire Service - Emergency Access Track/Fire Trail	Prior to the closure of Wallaby Scrub Road, the Applicant must do the following in consultation with Council, RMS and the RFS: (a) develop a suitable emergency access track/fire trail to the west of the approved mining pit in general accordance with the indicative trail/track shown in Appendix 8, and ensure that this track/trail complies with the relevant standards in the RFS Planning for Bush Fire Protection publication and the Bushfire Coordinating Committees Fire Trails Policy No. 2/2007, or its latest version;	Independent Environmental Audit Report for Yancoal Mount Thorley Warkworth, Hansen Bailey, July 2020			Assessed as compliant by 2020 Audit.	Complies	
		(b) develop a protocol with RFS that: - provided for ongoing access and use of the new emergency access track/fire trail following the closure of Wallaby Scrub Road; - provides for access to the site during emergencies on site to assist with any emergency response; and - provides for the Applicant to use the emergency response equipment and appropriately trained personnel on site to assist the RFS (and any other emergency agencies) respond to emergencies in the surrounding area, to the satisfaction of the Planning Secretary. Following approval, the Applicant must carry out the development in accordance with this protocol.	Mount Thorley, Warkworth for Rural Fire Service Access Trail (Fire Trail (Watts Track)) Mount Thorley, Warkworth for Rural Fire Service Access Trail (Fire Trail (Watts Track)) Email from Yancoal (T. Bates) to RFS (K Hepplewhite) titled "RFS Access Protocol" dated September 7, 2018 Email from RFS (K Hepplewhite) Yancoal (T. Bates) to titled "RFS Access Protocol" dated September 7, 2018 Independent Environmental Audit Report for Yancoal Mount Thorley Warkworth, Hansen Bailey, July 2020			Assessed as compliant by 2020 Audit. The protocol was prepared in consultation with the Rural Fire Services ongoing consultation has been undertaken with RFS with the protocol updated in 2019.	Complies	
S3 C51	Monitoring of Coal Transport	The Applicant must: a) keep records of the amount of coal transported from the development in each calendar year; and	Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023			Table 4.1 of each Annual Review provides details of the amount of coal transported from the project (annually)	Complies	
		b) make these records available on its website at the end of each calendar year.	Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023			The 2020 and 2021 Annual Reviews are publicly available on the MTW website; however, the 2022 Annual Review was not on the website at the time of this IEA. Therefore, the coal transport records for 2022 were not publicly available as required by this Condition. The Auditor notes that the 2022 Annual Review had been submitted to DPE but had not yet been approved.	Non-compliant	Ensure that the coal transportation records are regularly updated.

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Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
S3 C52	Visual Operating Conditions	<p>The Applicant must:</p> <p>a) implement all reasonable and feasible measures to minimise the visual and off-site lighting impacts of the development, including lighting impacts on road users and impacts of mining voids;</p>	Mt Thorley Warkworth Lighting Review EMM 6 May 2020	<p>Environment and Community Manager – The following information was provided to DPE 24 May 2023 in response to an RFI in May 2023:</p> <ul style="list-style-type: none"> o Progressive rehabilitation is used to minimise visual impact; o MTW uses vegetated bunds, vegetative screening, and screen fencing along the boundary of the site including adjoining public roads; o A lighting assessment review was completed most recently in May 2020 by EMM Consulting, for the purpose of reviewing lighting measures implemented at the site to ensure that their implementation is compliant with the relevant conditions of the approvals. The assessment included field lux measurements and qualitative assessment. The lighting review found that operations at MTW meet the approval requirements. The review found that “no improvements are currently required to address lighting impacts from any of the assessment locations assessed as part of this lighting review. Nonetheless, it is recommended that temporary lighting plant be inspected to ensure that all lighting is directed below the horizontal, where safe to do so.” o MTW’s operational procedures include consideration of lighting impacts from mobile lighting plant to minimise lighting impact to neighbours when setting up the lighting plant. In addition to consideration when setting up lighting plant, MTW utilises inspections from Community Response Officers around the boundary of operations at or just after dusk to attempt to identify any lighting plant that has potential to be intrusive, and feed directly back to operations to request and review lighting plant changes when considered appropriate. o For community lighting complaints, MTW’s complaint response process utilises MTW’s Community Response Officers to respond by inspecting the relevant area, discussing with community members, and feeding back directly to operations to request and review lighting plant changes when considered appropriate. 		<p>Environmental induction covers lighting. The Lighting review undertaken in 2020 confirms the offsite lighting impacts were meeting the requirements of this condition. However, 94 lighting complaints were received during the audit period. A review of the complaints indicates that the community impacts are from relocatable lighting and mobile plant, but that fixed lighting is not generating complaints. As part of the internal complaint investigations, CROs assess mobile lighting and arrange changes in light locations or direction and that the actions, in general resolve the issues. It is apparent that there is insufficient planning for the location and use of mobile lighting and therefore all reasonable and feasible mitigation measures have not been used.</p>	Non-compliant	<p>Ensure that personnel responsible for planning and / or managing night works undertake proactive planning for all after hours works. The planning should identify the optimal lighting setup for those activities and that the implementation of the lighting plans be checked prior to undertaking those activities by CROs or other appropriately trained personnel.</p>
		<p>b) establish and maintain vegetated bunds, vegetative screening and/or screen fencing along the boundary of the site including adjoining public roads where appropriate;</p>			<p>During the site inspection vegetated visual screening was observed from the major access roads to the site.</p>	<p>Visual screening has been maintained.</p>	Complies	

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Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
S3 C52	Visual Operating Conditions	c) ensure that all external lighting associated with the development complies with Australian Standard AS4282 (/NT) 1997 - Control of Obtrusive Effects of Outdoor Lighting, or its latest version; and	Mt Thorley Warkworth Lighting Review EMM 6 May 2020 MTW Environmental Monitoring Report, - Night Shift 13 August 2020 MTW Environmental Monitoring Report, - Night Shift 7 August 2021 Environmental Management at Yancoal MTW – New Starters Presentation 2022, 8 June 2023	Refer to Condition a) above.		Environmental induction covers lighting. The Lighting review undertaken in 2020 confirms the offsite lighting impacts was meeting the requirements of this condition. However, 90 lighting complaints were received during the audit period. A review of the complaints indicates that the community impacts are from relocatable lighting and mobile plant, but that fixed lighting is not generating complaints. As part of the internal complaint investigations, CROs assess mobile lighting and arrange changes in light locations or direction and that the actions, in general resolve the issues. It is apparent that there is insufficient planning for the location and use of mobile lighting and therefore all reasonable and feasible mitigation measures have not been used.	Non-compliant	Ensure that personnel responsible for planning and / or managing night works undertake proactive planning for all after hours works. The planning should identify the optimal lighting setup for those activities and that the implementation of the lighting plans be checked prior to undertaking those activities by CROs or other appropriately trained personnel.
		d) monitor and report on the effectiveness of these measures.	Mt Thorley Warkworth Lighting Review EMM 6 May 2020 MTW Environmental Monitoring Report, - Night Shift 13 August 2020 MTW Environmental Monitoring Report, - Night Shift 7 August 2021			The effectiveness of lighting controls is monitored through routine night shift inspection undertaken by the Community Relations Officer and is reported in each Annual Review (Section 6.6 – amenity and lighting)	Complies	
		e) Initial works to establish the vegetative bunds and/or screening referred to in condition 30(b) must be undertaken within 6 months of the date of commencement of development under this consent (unless otherwise agreed by the Planning Secretary), in accordance with a tree screening plan that has been prepared in consultation with Council and to the satisfaction of the Planning Secretary. The use of screen fencing must be limited to areas where vegetative screening is not feasible, or as an interim measure prior to establishment of vegetation.	Independent Environmental Audit Report for Yancoal Mount Thorley Warkworth, Hansen Bailey, July 2020			Assessed as Not Triggered by the previous audit as it was required prior to the audit period. Vegetation bunds/screening in condition 30(b) are illustrated on page 2 of the Rehab and Visual Screening Presentation provided by MTW during the IEA. The initial works began in 2016 with a shade cloth fitted to security fences from Dragline Crossing to Wallaby Scrub Road intersection. A Stage 1 bund was also constructed along a section of Putty Road. The 2017 audit sighted consultation with Singleton Council. No evidence that the Tree Screening Plan was prepared to the satisfaction of the Secretary.	Not Triggered	
S3 C53	Additional Visual Impact Mitigation	Upon receiving a written request from the owner of any residence on privately-owned land who has, or would have, significant direct views of the mining operations from this residence and/or its associated facilities (such as pool or barbeque area) during the development. the Applicant must implement additional visual mitigation measures (such as landscaping or vegetation screens) on the land in consultation with the landowner. These measures must be reasonable and feasible, and directed towards reducing the visibility of mining operations from the residence and/or its associated facilities. If within 3 months of receiving this request from the owner, the Applicant and the owner cannot agree on the measures to be implemented, or there is a dispute about the implementation of these measures, then either party may refer the matter to the Planning Secretary for resolution.		Environmental and Community Manager – no requests for addition visual impact mitigation has been received during the audit period.		No requests for addition visual impact mitigation have been received during the audit period.	No Triggered	

Project Approval SSD 6464 Warkworth Continuation Project (Mod 2)								
Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
S3 C54	Bushfire Management	<p>The Applicant must:</p> <p>a) ensure that the development is suitably equipped to respond to any fires on site; and</p>	Mount Thorley, Warkworth Bushfire Management Plan, Prepared by Emergency Services Officer, dated 17 September 2019			<p>The Bushfire Management Plan notes the following equipment is available on site which can be used for combating bushfires:</p> <ul style="list-style-type: none"> ISUZU FTO 800 2& 4 wheel drive firefighting appliance with a water capacity of 200 Litres and 120 litres of firefighting foam Water carts with waster capacity up to 2000 litres and 120 litres of firefighting foam D11 Dozers and graders to be used for the preparation of fire breaks Portable fire extinguishers, fire depots, and fire suppression throughout the mine infrastructure 	Complies	
		<p>b) assist the Rural Fire Service and emergency services as much as practicable if there is a fire in the vicinity of the site.</p>	Have there been any bushfires on site during this audit period?	Environment and Community Manager – No bushfires were experienced during the audit period.		No bushfires were experienced during the audit period.	Not Triggered	
S3 C55	Waste	<p>The Applicant must:</p> <p>a) implement all reasonable and feasible measures to minimise the waste (including coal rejects) generated by the development;</p>	<p>Waste Management Plan</p> <p>Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021</p> <p>Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022</p> <p>Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023</p>	<p>Environment and Community Manager – Production processes and CHPP aim to maximise coal recovery, and record strong yield performance, thereby minimizing coal reject.</p> <p>For general wastes – MTW has prepared an Internal Waste Management Plan and the Induction and training programs cover recycling and waste management.</p>	Facilities for the collection and segregation of wastes are provided at all maintenance and administrative areas. Photograph 6 -Waste Storage Area.	Facilities are provided across the site for the collections and segregation of wastes.	Complies	
		<p>b) ensure that the waste generated by the development is appropriately stored, handled and disposed of; and</p>	Waste Management Records		Facilities for the collection and segregation of wastes are provided at all maintenance and administrative areas.	Wastes are collected, segregated and stored appropriately on-site. Wastes are collected for off-site recycling or disposal by a waste contractor. Details of waste collection and disposal were sighted by the Auditor.	Complies	
		<p>c) monitor and report on effectiveness of the waste minimisation and management measures in the Annual Review.</p>	<p>Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021</p> <p>Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022</p> <p>Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023</p>	Environment and Community Manager – Waste reporting is covered in the Annual Review.		Routine reporting of waste management activities is included in the annual reviews.	Complies	

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Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
	Rehabilitation Objectives	The Applicant must rehabilitate the site in accordance with the provisions under the Mining Act 1992 and must be generally consistent with the proposed rehabilitation strategy described in the EIS (and depicted conceptually in the figure in Appendix 6) and comply with the objectives in Table 13.	Ecological Monitoring reports for Rehab areas for 2021 (Emergent Ecology/Dendra Systems) and 2022 (Emergent Ecology/Mosaic Ecology).	Environment and Community Manager - Rehabilitation Management Plan on website, which includes Forward Program and Rehabilitation Objectives. Interviews with rehabilitation staff were undertaken by the ecologists during site visit on 26 April 2023.	Parts of rehabilitation areas were inspected by the Ecologists on 26 April 2023.	Weed control is a significant management issue for the rehabilitation areas and the wider Hunter Valley, particularly following favourable weather conditions during the La Niña phase in 2020 – 2022. While current weed management controls are generally acceptable and in accordance with key guidelines, achieving long term performance and long-term completion criteria may require more intensive control actions. Ecological reports reviewed by the ecology specialists detailed the findings of monitoring in rehab areas. While some criteria are meeting relevant targets, further works, particularly in areas in early phases of treatment, are required to meet long term targets to establish self-sustaining ecosystems	Complies	<p>Recommendations to achieve targets, as detailed in the Ecological monitoring reports, include:</p> <ul style="list-style-type: none"> • More intensive weed control of High Threat Weeds; • Control of overly dominant natives (e.g Corymbia maculate, Acacia species) via thinning or changes to seed mix; and • Improved distribution of ground habitat features (such as logs);
S3 C56	Table 13	Feature	Objective					
		Mine site (as a whole)	<ul style="list-style-type: none"> • Safe, stable and non-polluting • Materials (including topsoils, substrates and seeds of the disturbed areas) are recovered, appropriately managed and used effectively as resources in the rehabilitation of the site • Final landforms to: o sustain the intended land use for the post-mining domains; o be designed to minimise the visual impacts of the development; o be in keeping with the natural terrain features of the area; o be integrated with the rehabilitated landforms of surrounding mines; o backfill the gap between the two main emplacements in accordance with the dozer (and dragline) option shown on the applicable figure in Appendix 6; o incorporate micro-relief; and o incorporate drainage lines consistent with topography and natural drainage where reasonable and feasible 					
		Water Quality	<ul style="list-style-type: none"> • Water retained on site is fit for the intended land use(s) for the post-mining domains • Water discharged from site is consistent with the baseline ecological, hydrological and geomorphic conditions of the creeks prior to mining disturbance • Water management is consistent with the applicable regional catchment strategy 					
		Final Voids	<ul style="list-style-type: none"> • Designed as long term groundwater sinks and to maximise groundwater flows across back-filled pits to the final void • Minimise: o the size and depth of final voids o the drainage catchment of final voids o any high wall instability risk • risk of flood interaction for all flood events up to and including the 1% AEP 					
		Biodiversity	<ul style="list-style-type: none"> • Restore ecosystem function, including maintaining or establishing self-sustaining ecosystems comprising local plant species • Vegetation to be established, with the restoration of at least 1,617 hectares of Central Hunter Grey Box – Ironbark Woodland EEC • Size, location and species of native tree lots and corridors are established to sustain biodiversity habitats • Species are selected that re-establishes and complements regional and local biodiversity 					
		Surface Infrastructure	<ul style="list-style-type: none"> • To be decommissioned and removed, unless the Resources Regulator agrees otherwise 					
		Agriculture	<ul style="list-style-type: none"> • Land capability classification for the relevant nominated agricultural pursuit for each domain is established and self-sustaining within 5 years of land use establishment (first planting vegetation) 					
		Community	<ul style="list-style-type: none"> • Ensure public safety • Minimise the adverse socio-economic effects associated with mine closure 					

Project Approval SSD 6464 Warkworth Continuation Project (Mod 2)									
Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations	
S3 C57	Progressive Rehabilitation	The Applicant must 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 must be employed when areas prone to dust generation cannot yet be permanently rehabilitated.	Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023			Annual Review reports detail progress of mine rehabilitation progress against MOP plans. The net rehabilitation progress (i.e. rehabilitation minus rehabilitation disturbance) for the 2015 – 2021 period was 20.4 ha higher than targets. A total of 47.9ha of new rehabilitation was completed during 2022 against a Mining Operations Plan 2022 target of 35ha. 2022 annual report notes that rehabilitation and disturbance forecasts submitted to Resources Regulator (submitted in August 2022) are based on financial year periods and therefore don't align with the calendar year Annual Review reporting period and the misalignment is intended to be corrected in the Forward Program to be submitted in May 2023.	Non-compliant	Increase the rate of progressive rehabilitation works with the objective of meeting the established progressive rehabilitation targets.	
S3 C58	Rehabilitation Management Plan	The Applicant must prepare a Rehabilitation Management Plan for the development to the satisfaction of the Resources Regulator. and carry out the development in accordance with this plan. The plan must:	Rehabilitation Management Plan, Revision 1, dated 28 July 2022.			The Rehabilitation Management Plan has been prepared.	Complies		
		a) be prepared in consultation with the Department, NOW, BCD and Council and the CCC;	Rehabilitation Management Plan, Revision 1, dated 28 July 2022.			Section 4.2 of the plan details the consultation undertaken on past and the current version of the plan.	Complies		
		b) be prepared in accordance with any relevant Resources Regulator guideline, including any NSW government policy regarding voids;	Rehabilitation Management Plan, Revision 1, dated 28 July 2022.	Environment and Community Manager – the latest version of the RMP was prepared in accordance with the Resource Regulator's Form and Way Document.			The latest version of the RMP was prepared in accordance with the Resource Regulator's Form and Way Document.	Complies	
		c) be submitted to the Resources Regulator for approval prior to carrying out any development under this consent;	Rehabilitation Management Plan, Revision 1, dated 28 July 2022.				Submitted via email and via spatial data portal. Review by Resources Regulator remains in progress. Correspondence with RR was sighted by the Auditor	Complies	
		d) Describe how the rehabilitation of the site would be integrated with the implementation of the biodiversity offset strategy;	Rehabilitation Management Plan, Revision 1, dated 28 July 2022.				The RMP does not address the integration of the mine site rehabilitation with the biodiversity off-set strategy.	Non-compliant	Review and revise the plan to include the integration of the mine site rehabilitation with the biodiversity off-set strategy.
		e) include detailed performance and completion criteria for evaluating the performance of the rehabilitation of the site, and triggering remedial action (if necessary);	Rehabilitation Management Plan, Revision 1, dated 28 July 2022.				Section 4 of the RMP describes the performance and completion criteria.	Complies	
		f) describe the measures that would be implemented to ensure compliance with the relevant conditions of this consent, and address all aspects of rehabilitation including timeframes for achieving specified rehabilitation objectives;	Rehabilitation Management Plan, Revision 1, dated 28 July 2022.				Rehabilitation implementation is discussed in Section 6 of the RMP. Section 7 describes the rehabilitation quality control processes; Section 8 describes the monitoring program and Section 10 describes the intervention and adaptative management processes.	Complies	
		g) includes a mine closure strategy, that details measures to minimise the long term impacts associated with mine closure, including final landform. final land use and socioeconomic issues;	Rehabilitation Management Plan, Revision 1, dated 28 July 2022.				Section 5 of the plan describes the final landforms and rehabilitation plan	Complies	

Project Approval SSD 6464 Warkworth Continuation Project (Mod 2)								
Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
S3 C58	Rehabilitation Management Plan	h) include interim rehabilitation where necessary to minimise the area exposed for dust generation;	Rehabilitation Management Plan, Revision 1, dated 28 July 2022.			The RMP does not address the interim rehabilitation of the site to minimise dust generation.	Non-compliant	Review and revise the plan to include the interim rehabilitation of the site to minimise dust generation.
		i) include a program to monitor, independently audit and report on the effectiveness of the measures, and progress against the detailed performance and completion criteria; and	Rehabilitation Management Plan, Revision 1, dated 28 July 2022.			Section 6 of the RMP describes the rehabilitation quality control processes and Section 8 describes the monitoring program.	Complies	
		j) build to the maximum extent practicable on the other management plans required under this consent.	Rehabilitation Management Plan, Revision 1, dated 28 July 2022.				Noted	
S4 C1	Notifications of Landowners / tenants	<p>Within 1 month of the date of this consent, the Applicant must:</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 Applicant to acquire their land in accordance with the procedures in conditions 5-6 below at any stage during the development; any residence on the land listed in Table 3 of schedule 3 that they have the right to request the Applicant to ask for additional noise mitigation measures to be installed at their residence at any stage during the development; and any privately-owned land within 2 kilometres of the approved open cut mining pits that they are entitled to ask for an inspection to establish the baseline condition of any buildings or structures on their land, or to have a previous property inspection report updated; 	<p>Independent Environmental Audit Report for Yancoal Mount Thorley Warkworth, Hansen Bailey, July 2020</p> <p>MTW 2017 Independent Environmental Audit, 2017 Independent Audit Report, Jacobs, 8 August 2018</p>			Assessed as compliant by the 2020 and 2017 Audits.	Complies	
		b) notify the tenants of any mine-owned land of their rights under this consent (see condition 18 of schedule 3); and				Assessed as compliant by the 2020 and 2017 Audits.	Complies	
		c) send a copy of the NSW Health fact sheet entitled "Mine Dust and You" (as may be updated from time to time) to the owners and/or existing tenants of any land (including mine-owned land) where the predictions in the EIS identify that dust emissions generated by the development are likely to be greater than the relevant air quality criteria in schedule 3 at any time during the life of the development.				Assessed as compliant by the 2020 and 2017 Audits.	Complies	

Project Approval SSD 6464 Warkworth Continuation Project (Mod 2)								
Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
S4 C2	Notifications of Landowners / tenants	<p>Prior to entering into any tenancy agreement for any land owned by the Applicant that is predicted to experience exceedances of the recommended dust and/or noise criteria, or for any of the land listed in Table 1 that is subsequently purchased by the Applicant, the Applicant must:</p> <p>a) advise the prospective tenants of the potential health and amenity impacts associated with living on the land, and give them a copy of the NSW Health fact sheet entitled "Mine Dust and You" (as may be updated from time to time); and</p>	<p>Residential Tenancy Agreement, 1 Wambo Road dated 3 September 2021 Residential Tenancy Agreement, 1/1946 Putty Road, 27 February 2023</p>			Residential tenancy agreements were entered into for a number of properties during the audit period. MTW provided those tenants with copies of the NSW Health fact sheet entitled "Mine Dust and You"	Complies	
		<p>b) advise the prospective tenants of the rights they would have under this consent, to the satisfaction of the Planning Secretary.</p>	<p>Residential Tenancy Agreement, 1 Wambo Road dated 3 September 2021 Residential Tenancy Agreement, 1/1946 Putty Road, 27 February 2023</p>			Residential tenancy agreements were entered into for a number of properties during the audit period. MTW provided those tenants with information on their rights under the Consent.	Complies	
S4 C3	Notifications of Landowners / tenants	<p>As soon as practicable after obtaining monitoring results showing:</p> <p>a) an exceedance of any relevant criteria in schedule 3, the Applicant must notify affected landowners in writing of the exceedance, and provide regular monitoring results to each affected landowner until the development is again complying with the relevant criteria; and</p>	<p>Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023</p>			There were noise exceedances recorded during the routine monthly monitoring within the audit period.	Not Triggered	
		<p>b) an exceedance of the relevant air quality criteria in schedule 3, the Applicant must send a copy of the NSW Health fact sheet entitled "Mine Dust and You" (as may be updated from time to time) to the affected landowners and/or existing tenants of the land (including the tenants of any mine-owned land).</p>	<p>Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023</p>			There were dust exceedances recorded during the routine monthly monitoring within the audit period.	Not Triggered	

Project Approval SSD 6464 Warkworth Continuation Project (Mod 2)								
Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
S4 C4	Independent Reviews	If an owner of privately-owned land considers the development to be exceeding the criteria in schedule 3 at his/her land, then he/she may ask the Planning Secretary in writing for an independent review of the impacts of the development on his/her land.	Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023	Environment and Community Manager – No independent Reviews were requested during the audit period.		No independent Reviews were requested during the audit period.	Not Triggered	
		If the Planning Secretary is satisfied that an independent review is warranted, then the Applicant must: a) commission a suitably qualified, experienced and independent expert, whose appointment has been approved by the Planning Secretary, to: • consult with the landowner to determine his/her concerns; • conduct monitoring to determine whether the development is complying with the relevant impact assessment criteria in schedule 3; and • if the development is not complying with these criteria then: o determine if the more than one mine is responsible for the exceedance, and if so the relative share of each mine regarding the impact on the land; o identify the measures that could be implemented to ensure compliance with the relevant criteria; and	Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023	Environment and Community Manager – No independent Reviews were requested during the audit period.		No independent Reviews were requested during the audit period.	Not Triggered	
		b) give the Planning Secretary and landowner a copy of the independent review within 2 months of the Planning Secretary's decision, unless the Planning Secretary agrees otherwise.	Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023	Environment and Community Manager – No independent Reviews were requested during the audit period.		No independent Reviews were requested during the audit period.	Not Triggered	

Project Approval SSD 6464 Warkworth Continuation Project (Mod 2)								
Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
S4 C5	LAND ACQUISITION	<p>Within 3 months of receiving a written request from a landowner with acquisition rights, the Applicant must make a binding written offer to the landowner based on:</p> <p>a) the current market value of the landowner's interest in the land at the date of this written request, as if the land was unaffected by the development, having regard to the:</p> <ul style="list-style-type: none"> 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 noise mitigation measures in condition 3 of schedule 3; 		Environment and Community Manager – No independent acquisitions for SDD 6464 requested during the audit period.		No independent acquisitions for SDD 6464 requested during the audit period.	Not Triggered	
		<p>b) the reasonable costs associated with:</p> <ul style="list-style-type: none"> relocating within the Muswellbrook, Singleton or Cessnock local government area, or to any other local government area determined by the Planning Secretary; and obtaining legal advice and expert advice for determining the acquisition price of the land, and the terms upon which it is to be acquired; and 		Environment and Community Manager – No independent acquisitions for SDD 6464 requested during the audit period.		No independent acquisitions for SDD 6464 requested during the audit period.	Not Triggered	
		<p>c) reasonable compensation for any disturbance caused by the land acquisition process.</p>		Environment and Community Manager – No independent acquisitions for SDD 6464 requested during the audit period.		No independent acquisitions for SDD 6464 requested during the audit period.	Not Triggered	
		<p>However, if at the end of this period, the Applicant and landowner cannot agree on the acquisition price of the land and/or the terms upon which the land is to be acquired, then either party may refer the matter to the Planning Secretary for resolution.</p>		Environment and Community Manager – No independent acquisitions for SDD 6464 requested during the audit period.		No independent acquisitions for SDD 6464 requested during the audit period.	Not Triggered	
S4 C6	Land Acquisition	The Applicant must pay all reasonable costs associated with the land acquisition process described in condition 5 above, including the costs associated with obtaining Council approval for any plan of subdivision (where permissible), and registration of this plan at the Office of the Registrar-General.		Environment and Community Manager – No independent acquisitions for SDD 6464 requested during the audit period.		No independent acquisitions for SDD 6464 requested during the audit period.	Not Triggered	

Project Approval SSD 6464 Warkworth Continuation Project (Mod 2)								
Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
S5 C1	Environmental Management Strategy	The Applicant must prepare an Environmental Management Strategy for the development to the satisfaction of the Planning Secretary, and carry out the development in accordance with this strategy. The strategy must:	Environmental Management Strategy, Mt Thorley Warkworth, Revision 2.1 dated 28/7/2022 Letter from DPE (M S Prott) to Warkworth Mining (G. Mulhearn) titled "Mount Thorley Continuation Project (SSD 6465) Warkworth Continuation Project (SSD 6464) Environmental Management Strategy" dated 20 July 2021			The strategy provides a suitable strategic framework for the environmental management of the development and was approved by the Planning Secretary on the 20 July 2021.	Complies	
		a) be submitted to the Planning Secretary for approval prior to carrying out any development under this consent;						
		b) provide the strategic framework for environmental management of the development;	Environmental Management Strategy, Mt Thorley Warkworth, Revision 2.1 dated 28/7/2022			Section 5 and Table 1 summarize the Statutory Approvals for the Development	Complies	
		c) identify the statutory approvals that apply to the development;	Environmental Management Strategy, Mt Thorley Warkworth, Revision 2.1 dated 28/7/2022			Section 6.2 summarises the roles and responsibilities of key roles for the implementation of the EMS	Complies	
		d) describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the development;	Environmental Management Strategy, Mt Thorley Warkworth, Revision 2.1 dated 28/7/2022			Sections 6.3- 6.6 of the Plan includes Information relating to: - Information dissemination - The role of the Community Consultative Committee - Provision of information via the project website - Community Complaints Management - Dispute Resolution - Emergencies	Complies	
		e) describe the procedures that would be implemented to: • keep the local community and relevant agencies informed about the operation and environmental performance of the mine development; • receive, handle, respond to, and record complaints; • resolve any disputes that may arise; • respond to any non-compliance; • respond to emergencies; and	Environmental Management Strategy, Mt Thorley Warkworth, Revision 2.1 dated 28/7/2022			Appendix C of the Strategy includes the approved Plans, strategies and programs that are required by both SSD 6464 and SSD 6465 with a reference to the MTW website. Including: - Noise Management Plan - Blast Management Plan - Water Management Plan - Aboriginal Heritage Management Plan - Wollombi Brook Aboriginal Cultural Heritage Area Conservation Area Plan of Management - Historic Heritage Management Plan - Rehabilitation Management Plan - Biodiversity Management Plan - Pollution Incident Response Management Plan	Complies	
f) include: • copies of any strategies, plans and programs approved under the conditions of this consent; and • a clear plan depicting all the monitoring required to be carried out under the conditions of this consent.	Environmental Management Strategy, Mt Thorley Warkworth, Revision 2.1 dated 28/7/2022			Appendix E includes details of all plans related to the Environmental Strategy and as required by the SSD. Appendix B provides details of all monitoring to be undertaken as part of the	Complies			

Project Approval SSD 6464 Warkworth Continuation Project (Mod 2)								
Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
S5 C2	Adaptive Management	The Applicant must assess and manage development-related risks to ensure that there are no exceedances of the criteria and/or performance measures in schedule 3. Any exceedance of these criteria and/or performance measures constitutes a breach of this consent and may be subject to penalty or offence provisions under the EP&A Act or EP&A Regulation.					Noted	
		Where any exceedance of these criteria and/or performance measures has occurred, the Applicant must, at the earliest opportunity: a) take all reasonable and feasible steps to ensure that the exceedance ceases and does not recur;	Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023			Examples of Adaptive Management Actions taken during the audit period: • noise exceedance – new handheld monitor purchased and tool developed to enable identification of low frequency noise for supplementary noise readings. • -blast exceedance – review of property ownership information to identify residences on privately owned land, and then update of Blast Management Plan to reflect this.	Complies	
		b) consider all reasonable and feasible options for remediation (where relevant) and submit a report to the Department describing those options and any preferred remediation measures or other course of action; and	Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023			• -water management – refer DPE correspondence folder regarding Action Plan for MTO sediment basin at various dates in the audit period, which is intended to divert rehabilitation runoff through a sediment basin and then offsite.	Complies	
		c) implement remediation measures as directed by the Planning Secretary.		Environment and Community Manager - No directions issued by DPE for remedial actions during the audit period.		No directions issued by DPE for remedial actions during the audit period.	Not Triggered	

Project Approval SSD 6464 Warkworth Continuation Project (Mod 2)									
Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations	
S5 C3	Management Plan Requirements	The Applicant must ensure that the management plans required under this consent are prepared in accordance with any relevant guidelines, and include: a) detailed baseline data;	Environmental Management Plans including: - Environmental Management Strategy - Air Quality Management Plan - Water Management Plan - Blast Management Plan - Social Impact Management Plan			Baseline data is provided in Section 4 of the various management plans (Existing Character) where applicable	Complies		
		b) a description of: • the relevant statutory requirements (including any relevant approval, licence or lease conditions); • any relevant limits or performance measures/criteria; • the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the development or any management measures;		- Pollution Incident Response Management Plan - Rehabilitation Management Plan - Biodiversity Management Plans (various)			The management plans include the relevant statutory/ approval requirements as well as criteria to be achieved	Complies	
		c) a description of the measures that would be implemented to comply with the relevant statutory requirements, limits, or performance measures/criteria;		- Aboriginal Heritage Management plan - Historic Heritage Management Plan			The management plans include details of management and mitigation options.	Complies	
		d) a program to monitor and report on the: • impacts and environmental performance of the development; • effectiveness of any management measures (see c above);					The management plans include monitoring programs to evaluate the effectiveness of any management measures.	Complies	
		e) a contingency plan to manage any unpredicted impacts and their consequences;				The management plans include monitoring programs to evaluate the effectiveness of any management measures and contingency planning.	Complies		
		f) a program to investigate and implement ways to improve the environmental performance of the development over time;	Environmental Management Strategy, Mt Thorley Warkworth, Revision 2.1 dated 28/7/2022			Adaptive management process is provided in the EMS.	Complies		
		g) protocol for managing and reporting any: • incidents; • complaints; • non-compliances with statutory requirements; and • exceedances of the impact assessment criteria and/or performance criteria; and	Environmental Management Strategy, Mt Thorley Warkworth, Revision 2.1 dated 28/7/2022			Various sections of the Environmental Management Strategy describe the relevant processes as follows: - Incidents (Section 7.5) - Complaints (Section 6.5) - Non compliances (Section 7.4) - Exceedences (Section XX)	Complies		
		h) a protocol for periodic review of the plan.	Environmental Management Strategy, Mt Thorley Warkworth, Revision 2.1 dated 28/7/2022			Section 8 of the Environmental Management Strategy describes the process for Review of the Environmental Management Strategy as well as any other subordinate strategies, plans and programs described by the development consents.	Complies		

Project Approval SSD 6464 Warkworth Continuation Project (Mod 2)								
Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
S5 C4	Annual Review	By the end of March each year, the Applicant must review the environmental performance of the development for the previous calendar year to the satisfaction of the Planning Secretary. This review must:	<p>Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021</p> <p>Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022</p> <p>Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023</p> <p>2019 - Letter from Yancoal (G.Mulhearn) to DPE (Ann Hagerthy) titled " Mt Thorley Warkworth SSD 6464 and SSD Annual Review Report" dated 31 March 2020</p> <p>Letter from DPE (H.Watters) to Yancoal Australasia (G. Mulhearn) titled " Mt Thorley Warkworth Complex – SSD 6464 (Continuation Project) and SSD 6465 (Mount Thorley Continuation Project) Annual Review 2019 dated 17 June 2020</p> <p>2020 - DPE Post Approval form reference Schedule 5 Condition 4 dated 29 April 2021</p> <p>Letter from DPE (H.Watters) to Yancoal Australasia (G. Mulhearn) titled " Mt Thorley Warkworth SSD 6464 and SSD Annual Review 2020 dated 2 November 2021</p> <p>2021 - Email from DPE (Major Projects) to Yancoal (G. Mulhearn), 6 April 2022</p> <p>Letter from DPE (H. Watters) to Yancoal (G. MULhearn) titled " Warkworth Continuation (SSD -6464) and Mt Thorley Continuation (SSD-6465) 2021 Annual Review – Request for Additional Information" dated 20, June 2022</p> <p>Letter from DPE (H. Watters) titled "Warkworth Continuation – 2021 Annual Review (SSD – 6464)" dated 10 October 2022</p> <p>2022 - Letter from Yancoal (G.Mulhearn) to DPE (H.Watters) titled "Mt Thorley Warkworth Complex (SSD-6464 and SSD – 6465) Annual Review Report</p> <p>Letter from DPE (H. Watters) to Yancoal (G. MULhearn) titled "Warkworth Continuation – Extension Request – 2022 Annual Review (SSD 6464) Extension of Time to Type of Request" dated 28 March 2023</p>			<p>2019 Annual Review</p> <ul style="list-style-type: none"> lodged with DPE on the 31 March 2020 endorsed by DPE on the 17 June 2020 <p>2020 Annual Review</p> <ul style="list-style-type: none"> lodged with DPE on the 29 April 2021 endorsed by DPE on the 2nd of November 2021 An extension of time was granted by DPE to lodge the Annual Review by 31st of April 2021 <p>2021 Annual Review</p> <ul style="list-style-type: none"> lodged with DPE on the 31 March 2022 DPE requested additional information on 20 June 2022 endorsed by DPE on the 10 October 2022 <p>2022 Annual Review</p> <ul style="list-style-type: none"> Extension of time requested on 27 March 2023 to lodge AR on 1 May 2023 Approval for extension of time to 1 May 2023 granted by DPE Lodged with DPE on 1 May 2023 DPE advised on 2 May 2023 of their commencement of their detailed assessment Annual review is yet to be endorsed by DPE 	Complies	

Project Approval SSD 6464 Warkworth Continuation Project (Mod 2)								
Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
S5 C4	Annual Review	<p>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>Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021</p> <p>Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022</p> <p>Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023</p>			<p>Section 4 of each Annual Review summarises the following activities undertaken during the audit period:</p> <ul style="list-style-type: none"> • Mining activities • Mineral Processing • Production statistics • Summary of changes (development and equipment upgrades) <p>Section 7 and Appendix 8 of each Annual Review provides a comprehensive summary of rehabilitation activities undertaken</p>	Complies	
		<p>b) include a comprehensive review of the monitoring results and complaints records of the development over the past year, which includes a comparison of these results against the:</p> <ul style="list-style-type: none"> • relevant statutory requirements, limits or performance measures/criteria; • monitoring results of previous years; and • relevant predictions in the EIS; 	<p>Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021</p> <p>Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022</p> <p>Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023</p>			<p>Section 6 of each Annual Review provides a comprehensive review of the monitoring results, including meteorological data, noise, blasting, air quality, water, and waste. Section 8 of each Annual Review provides a summary of complaints, communications, and community engagement activities.</p> <p>A comparison against the predictions in the EA are made for noise and dust (refer to Tables 6.5 (noise) and 6.7 (dust). Surface water monitoring results are assessed against trigger limits</p>	Complies	
		<p>c) identify any non-compliance over the last year, and describe what actions were (or are being) taken to ensure compliance;</p>	<p>Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021</p> <p>Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022</p> <p>Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023</p>			<p>Section 10 of each Annual Review provides details of incidents and noncompliance as well as activities to be completed in the next year</p>	Complies	
		<p>d) identify any trends in the monitoring data over the life of the development;</p>	<p>Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021</p> <p>Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022</p> <p>Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023</p>			<p>Long term monitoring trends are graphically presented in figures throughout the document.</p>	Complies	
		<p>e) identify any discrepancies between the predicted and actual impacts of the development, and analyse the potential cause of any significant discrepancies; and</p>	<p>Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021</p> <p>Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022</p> <p>Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023</p>			<p>Section 6 of each Annual Review provides a comprehensive review of the monitoring results, including meteorological data, noise, blasting, air quality, water and waste. Section 8 of each Annual Review provides a summary of complaints, communications and community engagement activities.</p> <p>A comparison against the predictions in the EA are made for noise and dust (refer to Tables 6.5 (noise) and 6.7 (dust). Surface water monitoring results are assessed against trigger limits</p>	Complies	
		<p>f) describe what measures will be implemented over the next year to improve the environmental performance of the development.</p>	<p>Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021</p> <p>Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022</p> <p>Mt Thorley, Warkworth 2021 Annual Review, 1 May 2023</p>			<p>Section 11 provides details of actions to be completed over the next reporting period to improve the environmental performance</p>	Complies	

Project Approval SSD 6464 Warkworth Continuation Project (Mod 2)								
Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
S5 C5	Revision of Strategies, Plans and Programs	Within 3 months of:						
		a) the submission of an: <ul style="list-style-type: none"> annual review under condition 4 above; incident report under condition 7 below; audit report under condition 9 below; or 	Environmental Management Plans Review Register 2020			Detailed registers of document reviews are maintained by Yancoal to plan and track document reviews.	Complies	
		b) any modification to the conditions of this consent (unless the conditions require otherwise), or	Environmental Management Plans Review Register 2021 Environmental Management Plans Review Register 2022			This includes the review due date, review completion date, designated reviewer and revision due date.	Complies	
		c) the introduction of any NSW government policy regarding voids, the Applicant must review, and if necessary revise, the strategies, plans, and programs required under this consent to the satisfaction of the Planning Secretary.					Complies	
		d) Where this review leads to revisions in any such document, then within 4 weeks of the review, unless the Planning Secretary agrees otherwise, the revised document must be submitted to the Planning Secretary for approval.	Letter from Yancoal (G.Mulhearn) to DPE (M Sprott) titled "Mount Thorley Warkworth updated Water Management Plan" dated 20 December 2019 Letter from DPE (M Sprott) to Yancoal (G Mulhearn) titled "Mount Thorley Water Management Plan, dated 13 May 2020 Letter from DPE (J Fittell) to Yancoal (G.Mulhearn) titled "Mt Thorley Continuation Project (SSD -6465) and Warkworth Continuation Project SSD (6464) dated 8 August 2022			Examples were provided which confirmed DPE had reviewed and approved management plans during the audit period	Complies	
S5 C6	Community Consultative Committee	The Applicant must operate a Community Consultative Committee (CCC) for the development to the satisfaction of the Planning Secretary. This CCC must be operated in accordance with the Guidelines for Establishing and Operating Community Consultative Committees for Mining Projects (Department of Planning, 2007, or its latest version). It may also be combined with any CCC for the Warkworth mine.	MTW Website Community - MOUNT THORLEY WARKWORTH COAL OPERATIONS LIMITED (mtwcoal.com.au)			The current Mount Thorley Warkworth Community consultative committee comprises an independent chair, the MTW General Manager, Environment Manager, Singleton Shire Council, Singleton Shire Healthy Environment Group and members of the local community. A copy of the CCC guidelines are provided on the MTW website along with the minutes of CCC meetings from 2016 - 2023	Complies	

Project Approval SSD 6464 Warkworth Continuation Project (Mod 2)										
Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations		
S5 C7	Reporting	The Applicant must immediately notify the Planning Secretary and any other relevant agencies of any incident. Within 7 days of the date of the incident, the Applicant must provide the Planning Secretary and any relevant agencies with a detailed report on the incident, and such further reports as may be requested.	Reportable Incident Correspondence – all incidents were reported within the timeframes specified in the Approval or as directed by DPE.	The following incidents have been notified to the Planning Secretary relating to the Warkworth Operations					Complies	
				Date	DPE Notification Date	Other Agencies Notification	DPE Report date	Incident Type		
				4/1/21	4/1/21	4/1/21	29/1/21	Water Discharge		
				19/3/21	19/3/21	19/3/21	29/3/21	Water discharge		
				11/1/21	11/11/21	11/11/21	18/11/21	Water discharge		
				26/11/21	26/11/21	26/11/21	3/12/21	Water discharge		
				24/2/23	24/2/22	3/2/22	3/2/22	Blast overpressure		
				7/3/23	7/3/23	7/3/23	14/3/22	Water discharge		
				26/3/22	26/3/22	1/4/22	1/4/22	Water discharge		
				6/4/22	6/4/22	-	14/4/22	Noise exceedance		
				3/7/22	3/7/22	3/7/22	12/7/22	Water discharge		
				20/7/22	21/7/23	-	28/7/22	Noise exceedance		
				14/9/22	15/9/22	-	21/9/22	Noise Exceedance		
				8/10/22	8/10/22	8/10/22	14/10/22	Water Discharge		
S5 C8	Regular Reporting	The Applicant must provide regular reporting on the environmental performance of the development on its website, in accordance with the reporting arrangements in any plans or programs approved under the conditions of this consent.	MTW Website Mount Thorley Warkworth Coal (mtwcoal.com.au)			The MTW website includes monthly environmental monitoring reports as well as real time data for air quality, noise and complaints.	Complies			

S5 C9	Independent Environmental Audit	Within 1 year of the commencement of development under this consent. and every 3 years thereafter, unless the Planning Secretary directs otherwise, the Applicant must commission and pay the full cost of an Independent Environmental Audit of the development. This audit must:	<p>Independent Environmental Audit Report for Yancoal Mount Thorley Warkworth, Hansen Bailey, July 2020</p> <p>Mt Thorley Warkworth Complex (SSD-6464 and SSD -6465) Independent Audit 2020 – Responses to Audit Recommendations</p> <p>MTW 2017 Independent Environmental Audit, 2017 Independent Audit Report, Jacobs, 8 August 2018</p> <p>Response to Non – Compliances and Recommendations MTW IEA 2017 (Rev C)</p> <p>2016 Independent Environmental Audit, Mt Thorley and Warkworth Operations, Peter Horn, 12 May 2016</p>			<p>Independent audits were undertaken in 2016, 2017, 2020 and 2023 (this audit)</p> <p>The 2023 audit has been undertaken within 3 years of the previous (2020 audit)</p>	Complies	
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Project Approval SSD 6464 Warkworth Continuation Project (Mod 2)								
Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
		a) be conducted by a suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Planning Secretary;	<p>Independent Environmental Audit Report for Yancoal Mount Thorley Warkworth, Hansen Bailey, July 2020</p> <p>Letter from DPE (H. Watters) to Yancoal (G. Mulhearn) titled "Mt Thorley Warkworth Complex (SSD 6464 and SSD 6465) – 2020 Independent Environmental Audit" dated 24 February 2020</p>			The previous audit was undertaken by Hansen Bailey, the audit team, were approved by DPE on the 24 February 2020	Complies	
		b) include consultation with the relevant agencies;	Independent Environmental Audit Report for Yancoal Mount Thorley Warkworth, Hansen Bailey, July 2020			Agency consultation is summarized in Section 3.3 with full records of consultation provided in Appendix A	Complies	
		c) assess the environmental performance of the development and assess whether it is complying with the requirements in this consent and any relevant EPL or Mining Lease (including any assessment, plan or program required under these approvals);	Independent Environmental Audit Report for Yancoal Mount Thorley Warkworth, Hansen Bailey, July 2020			Section 6 of the audit report provides details of non-compliances with the project conditions of consent including the EPL and the mining lease	Complies	
		d) include an assessment - undertaken by an independent expert whose appointment has been endorsed by BCD - of the progress towards implementation of the biodiversity offset strategy in particular the regeneration of the Warkworth Sands Woodland against the detailed performance and completion criteria under the Biodiversity Management Plan (see condition 36 of schedule 3);	Letter from DPE (H.Watters) to Yancoal (G.Mulhearn) titled "Mt Thorley Warkworth Complex (SSD 6464 and 6465)- 2020 Independent Environmental Audit dated 24 February 2020			WSP are the nominated ecologist and were endorsed by DPE. The assessment undertaken to address this condition is included in Appendix F of the 2020 IEA.	Complies	
		e) review the adequacy of strategies, plans or programs required under the abovementioned approvals; and	Independent Environmental Audit Report for Yancoal Mount Thorley Warkworth, Hansen Bailey, July 2020			Section 4 and Appendix E of the 2020 IEA address this requirement	Complies	
		f) recommend appropriate measures or actions to improve the environmental performance of the development, and/or any assessment, plan or program required under the above-mentioned approvals.	Independent Environmental Audit Report for Yancoal Mount Thorley Warkworth, Hansen Bailey, July 2020			Section 7 (Table 8) of the 2020 independent environmental audit provides a series of recommendations aimed at improving the environmental performance.	Complies	
S5 C10	Independent Environmental Audit	Within 6 weeks of the completion of this audit, unless the Planning Secretary agrees otherwise. the Applicant must submit a copy of the audit report to the Planning Secretary, together with its response to any recommendations contained in the audit report.	<p>Letter from DPE (H. Watters) to Yancoal (G.Mulhearn) titled "Mt Thorley Warkworth Complex (SSD 6464 and SSD 6465) 2020 Independent Environmental Audit" dated 16 June 2020</p> <p>Letter from DPE (H. Watters) to Yancoal (G. Mulhearn) titled " Mount Thorley and Warkworth Complex (SSD 6464 and SSD – 6465) Independent Environmental Audit dated 10 July 2020</p>			DPE granted an extension of time for the submission of the 2020 audit report to the 17 July 2020.	Complies	

Project Approval SSD 6464 Warkworth Continuation Project (Mod 2)								
Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
S5 C11	ACCESS TO INFORMATION	<p>From the commencement of development under this consent, the Applicant must:</p> <p>(a) make the following information publicly available on its website:</p> <ul style="list-style-type: none"> • the EIS; • current statutory approvals for the development; • current statutory approvals for the development; • approved strategies, plans or programs required under the conditions of this consent; • a comprehensive summary of the compliance monitoring results of the development, reported in accordance with the specifications in any conditions of this consent, or any approved plans and programs; • the results of real time noise monitoring, updated daily (unless otherwise agreed by the Planning Secretary); • a complaints register, which is to be updated monthly; • minutes of CCC meetings; • the last five annual reviews of the development (for the last 5 years, if applicable); • any independent environmental audit; and the Applicant's response to the recommendations in any audit; • any other matter required by the Planning Secretary; and <p>(b) keep this information up to date;</p>	<p>Mount Thorley Warkworth Coal (mtwcoal.com.au)</p>			<p>The website includes the following documents:</p> <ul style="list-style-type: none"> • Environmental Impact Assessment • Project Modifications • Environmental Management Strategy and Plans including: <ul style="list-style-type: none"> ○ Environmental Management Strategy ○ Air Quality Management ○ Noise Management ○ Waste Management ○ Blast Management ○ Pollution Incident Response Management ○ Rehabilitation ○ Biodiversity ○ Indigenous and Cultural Heritage • Statutory Approvals including: <ul style="list-style-type: none"> ○ SSD 6465 Mt Thorley Continuation Development Consent ○ EPL 1976 Mount Thorley Operations Pty Ltd ○ EPBC 2009/5081 ○ EPBC 2002/629 • Monthly environmental monitoring reports that include annual complaints register • Community consultative committee meeting minutes • Annual Review reports dated from 2016 to 2022. The 2022 AR was not loaded onto the website as it had not been approved by DPE. • Independent Audits and response to audit findings for years 2016 to 2020 	Complies	

Compliance Register SSD 6465 Mt Thorley

Appendix A2

Project Approval SSD 6465 Mt Thorley

Cond	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
S2 C1	Obligation to Minimise Harm to the Environment	In addition to meeting the specific performance criteria established under this consent, the Applicant must implement all reasonable and feasible measures to prevent and/or minimise any material harm to the environment that may result from the construction, operation, or rehabilitation of the development.	Documents as noted below			Although there have been incidents and non-compliances with the conditions of approval, it was observed during the site inspection and through interviews and site observations made during the audit that the measures implemented on site were reasonable and feasible with appropriate corrective actions implemented in the event of incidents and non-compliances.	Complies	
S2 C2	Terms of Consent	The Applicant must carry out the development: <ul style="list-style-type: none"> a. generally, in accordance with the EIS and 				Based on the observations made during the site inspection, review of management plans, monitoring data and other records, it may be reasonably concluded that the Development is being undertaken generally in accordance with the EIS. An appropriate level of resourcing has been applied to manage compliance with the Development Consent	Complies	
		<ul style="list-style-type: none"> b. in accordance with the conditions of this consent 				There have been some instances where the condition of this consent has not been complied with, therefore compliance with this condition has not been achieved. Refer to individual conditions below.	Noted	
S2 C3	Terms of Consent	If there is any inconsistency between the above documents, the most recent document must prevail to the extent of the inconsistency. However, the conditions of this approval must prevail to the extent of any inconsistency.					Noted	
S2 C4	Terms of Consent	The Applicant must comply with any reasonable requirement/s of the Planning Secretary arising from: <ul style="list-style-type: none"> a) any reports, strategies, plans, programs, reviews, audits or correspondence that are submitted in accordance with this consent; 	Letter from Yancoal (G.Mulhearn) to DPE (A Hagerthy) titled "Warkworth Mining Limited (SSD 64-64)- Blast Event (N39-BF8-MD1). DPE Ref SSD- 6464-PA-37" dated 3 March 2022 Letter from DPE (H.Watters) to Yancoal (G.Mulhearn) titled "Warkworth Continuation (SSD-6464)- Blast Exceedence 24 February 2022			DPE directed Yancoal to update and resubmit the Blast Management Plan to DPE for review following the blasting incident report submitted to the Department on the 3 March 2022. The revised BMP was submitted to DPE on the 20 th of January 2022 and approved on the 24 th of March 2023/	Complies	
		<ul style="list-style-type: none"> b) any reports, reviews or audits commissioned by the Department regarding compliance that are submitted in accordance with this consent; 		Environment and Community Manager – no reports, reviews or audits were commissioned by the Department			Not triggered	
		<ul style="list-style-type: none"> c) the implementation of any actions or measures contained in these documents. 				The Auditor has reviewed correspondence between MTW and DPE and found that MTW has responded to directions issued by DPE during this audit period	Complies	
S2 C5	Limits on Consent Mining Operations	The Applicant may carry out mining operations on site for 21 years from the date of commencement of development under this consent.	Noted				Noted	

Project Approval SSD 6465 Mt Thorley

Cond	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
S2 C6	Coal Extraction	The Applicant must not extract more than 10 million tonnes of ROM coal from the Mt Thorley mine in a calendar year.	Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023		Photograph 7 Mt Thorley Open Cut Mine.	Table 4.1 of each Annual Review documents the following tonnages of ROM coal extracted: <ul style="list-style-type: none"> 2020 – 0.88 2021 – 0.43 2022 – 0.13 The recorded tonnages are less than the maximum tonnage prescribed by this condition, therefore compliant.	Complies	
S2 C7	Coal Transport	The Applicant Must: a) not transport any coal produced at the development by public road; and	Records (extract) of coal transport quantities of audit period.		No coal was observed to be exported from the site by public road during the audit inspection.	No evidence was found that coal is exported from the site, other than by rail.	Complies	
S2 C7	Coal Transport	a) ensure that the coal produced on site is only sent to Mt Thorley Coal Loader for transport by rail to export and/or domestic markets	Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023		No coal was observed to be exported from the site during the audit inspection. All coal was transported internally by truck to the Coal Loader for export by train.	No evidence was found that coal is exported from the site, other than by rail.	Complies	
S2 C8	Commencement of Development Under This Consent	The Applicant must: a) notify the Planning Secretary in writing of the date of commencement of development under this consent; and	MTW Independent Environmental Audit 2017 Independent Audit Report Jacobs, 8 th of August 2018			Assessed as compliant by the 2017 audit. Notification was made to the Department on the 16 th of February 2016 with the date of commencement on the 15 th of February 2015	Complies	
		a) may only commence development under this consent once the Planning Secretary has agreed in writing that all prerequisites to the commencement of development under this consent have been met.	MTW Independent Environmental Audit 2017 Independent Audit Report, Jacobs, 8 th of August 2018			Assessed as compliant by the 2017 audit. DPE letter dated 8 th February 2016 notifying MTW that all required documentation was in place.	Complies	
S2 C9	Surrender of Existing Development Consent	By the end of January 2017, unless the Planning Secretary agrees otherwise, the Applicant must surrender the existing development consent (DA-34/95) for the Mt Thorley mine in accordance with Section 104A of the EP&A Act. Following the commencement of development under this consent, the conditions of this consent shall prevail to the extent of any inconsistency with the conditions of DA-34/95.	Independent Environmental Audit Report for Yancoal Mt Thorley Warkworth, Hansen Bailey, July 2020 Letter from DPE (H Reed) to Yancoal (M.Lloyd) titled "Surrender of Warkworth (DA 300-9-2002-i) Mt Thorley (DA 34/95) and other historical consents Letter from Yancoal (G.Mulhearn) to DPE (H.Reed) titled "Development Consent" Mt Thorley Operations Pty Ltd" dated 4 June 2019			On the 11 th of October 2017 DPE granted an extension of time for the surrender of the development consent till the end of January 2019. Yancoal wrote to DPE on the 4 June 2019 requesting surrender of the historic development consents. On 13 June 2019, DPE surrendered development consents DA 34/95 as well as historical development consents dated 5 March 1991 and 12 January 1983. DPE advised in their letter that the consent was surrendered to meet the intent of this condition on 13 June 2019, which is prior to the audit period.	Complies	

Project Approval SSD 6465 Mt Thorley

Cond	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
S2 C10	Structural Adequacy	The Applicant must 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 and SA NSW.	<p>Acrocert Construction Certificate – Notice of Determination number 2022-0781 dated 30 November 2022 (In Pit Offices)</p> <p>Acrocert Complying Development – Notice of Determination number 2022-0132 dated 30 November 2022 (Communications Tower)</p> <p>Acrocert Construction Certificate – Notice of Determination number 2022-0534 dated 7 December 2022 (New Workshop)</p>	<p>Environment and Community Manager - The following facilities were constructed during this audit period:</p> <ul style="list-style-type: none"> LTE Tower (Certificate of Compliance) MTW North Workshop 		<p>AcroCert have been appointed as the independent certifier have provided construction certificates and certificates of compliance for the following buildings</p> <ul style="list-style-type: none"> LTE Tower (Certificate of Compliance) MTW North Workshop <p>Each of the Certificates notes the BCA Classification</p>	Complies	
S2 C11	Demolition	The applicant must ensure that all demolition work on site is carried out in accordance with AS 2601-2001: The Demolition of Structures, or its latest version.		Environment and Community Manager – no demolition works were undertaken during the audit period.		No demolition works were undertaken during the audit period.	Not Triggered	
S2 C12	Protection of Public Infrastructure	Unless the Applicant and the applicable authority agree otherwise, the Applicant must:		Environment and Community Manager – no damage to public road associated with any MTW works occurred during the audit period.		No damage to public road associated with any MTW works occurred during the audit period.	Not Triggered	
		a) repair, or pay the full costs associated with repairing, any public infrastructure that is damaged by the development; and		Environment and Community Manager – no damage to public road associated with any MTW works occurred during the audit period.		No damage to public road associated with any MTW works occurred during the audit period.	Not Triggered	
S2 C13	Operation of Plant and Equipment	The Applicant must ensure that all plant and equipment used on site, or to monitor the performance of the development, is maintained and operated in a proper and efficient manner	Plant and Equipment maintenance records.	Maintenance Manager demonstrated the operation of the mine Maintenance Management System. The system provides a framework for the management of routine maintenance and the identification and rectification of plant and equipment issues.	Designated equipment maintenance areas were inspected. Complex management systems and equipment are implemented to plan and record routine servicing and unplanned maintenance for items of plant, including coal trucks, drill rigs etc.	Designated equipment maintenance areas were inspected. Complex management systems and equipment are implemented to plan and record routine servicing and unplanned maintenance for items of plant, including coal trucks, drill rigs etc. The maintenance management system implemented at the mine are designed to ensure the efficient operation of plant and equipment were comprehensive	Complies	
S2 C14	Updating & Staging of Strategies, Plans and Programs	With the approval of the Planning Secretary, the Applicant may:	Has this condition been triggered during this audit period? If yes please provide relevant DPE correspondence.	Environment and Community Manager – MTW submits management plans as required during the audit period.			Noted	
		b) submit any strategy, plan or program required by this consent on a progressive basis; and		Environment and Community Manager – MTW submits management plans as required during the audit period.			Noted	
		c) combine any strategy, plan or program required by this consent with any similar strategy, plan or program required for the Warkworth mine.						

Project Approval SSD 6465 Mt Thorley

Cond	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
		<p>To ensure these strategies, plans or programs are updated on a regular basis, the Applicant may at any time submit revised strategies, plans or programs to the Planning Secretary for approval. With the agreement of the Planning Secretary, the Applicant may prepare any revised strategy, plan or program without undertaking consultation with all parties under the applicable condition of this consent.</p> <p>Notes:</p> <ul style="list-style-type: none"> • While any strategy, plan or program may be submitted on a progressive basis, the Applicant will need to ensure that the existing operations on site are covered by suitable strategies, plans or programs at all times. • If the submission of any strategy, plan or program is to be staged, then the relevant strategy, plan or program must clearly describe the specific stage to which the strategy, plan or program applies, the relationship of this stage to any future stages, and the trigger for updating the strategy, plan or program. 	<p>Letter from DPE (J. Fittell) to Warkworth Mining Limited (G Mulhearn) titled "Approval of Warkworth Continuation Project Blast Management Plan" dated 24 March 2023</p>			<p>During the audit period, a number of management plans were reviewed and updated, including (but not limited to) the Environmental Strategy, Noise Management Plan and the various biodiversity management plans.</p> <p>In their letter of approval for the Blast Management Plan dated 24 March 2023, DPE agreed that in accordance with Condition 14 of Schedule 2, that consultation with each of the relevant parties listed in Condition 16 of Schedule 3 is not required given the administrative updates.</p>	Complies	
S2 C15	Community Enhancement Program	<p>Within 6 months of the date of this consent, unless the Planning Secretary agrees otherwise, the Applicant must enter into a VPA with Council in accordance with:</p> <p>a) Division 6 of Part 4 of the EP&A Act; and</p>	<p>Independent Environmental Audit Report for Yancoal Mt Thorley Warkworth, Hansen Bailey, July 2020</p> <p>Agenda, Mt Thorley Warkworth Voluntary Planning Agreement Community Meeting, 1 June 2023</p>			Assessed as compliant in the 2020 audit	Complies	
		<p>b) the terms of Applicant's offer in its letter to the Department dated 4 May 2015</p>	<p>Minutes, Mt Thorley Warkworth Voluntary Planning Agreement Community Meeting, 9 February 2023</p>			Assessed as compliant in the 2020 audit	Complies	
		<p>The VPA must include provisions for the payment, collections, management and distribution of the contributions under the agreement, with a focus on funding community infrastructure and services in the area surrounding, including Bulga Village.</p>	<p>Agenda, Mt Thorley Warkworth Voluntary Planning Agreement Community Meeting, 9 February 2023</p> <p>Minutes, Mt Thorley Warkworth Voluntary Planning Agreement Community Meeting, 3 November 2022</p>			Assessed as compliant in the 2020 audit	Complies	
		<p><i>Note: The Applicant's offer comprises a total contribution of \$11 million over 21 years for both the development and the Warkworth Continuation Project (SSD-6464).</i></p>	<p>VPA: Warkworth and Mt Thorley Continuation Proects, financial statement as at 31 December 2022</p>			Assessed as compliant in the 2020 audit	Complies	

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Cond	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations			
S3 C1	Acquisition on Request	Upon receiving a written request for acquisition from the owner of the land listed in Table 1, the Applicant shall acquire the land in accordance with the procedures in conditions 5 and 6 of schedule 4.	<p>Letter from Spark Helmore Lawyers (A McKelvey) to Yancoal (N Cook) titled "Exercise of acquisition rights under Mount Thorley Continuation Project Development Consent (SSD -6465) Property Loders Hill, 887 Putty Road, Mount Thorley (Lot 40 in DP 1147419) dated 12 October 2022</p> <p>Letter from TEW Advisor titled "Lot 5 DP 10022 (Receptor K) Asset Situated Proximate to Mount Thorley Operations Pty Ltd 2015 Continuation Project Development Consent SSD 6465 (Development Consent) dated 21 December 2022</p>	<p>Environment and Community Manager - Written acquisition requests have been received for two properties:</p> <p>Property K – Recluse - Lot 5 DP 10022 Putty Road Bulga</p> <ul style="list-style-type: none"> AUR Request letter dated 21 December 2022. Offer tabled 7 March 2023 (Costello Group on behalf of MTO and Robert Tew valuer on behalf of Recluse Pty Ltd) Offer is made with respect to (a) - (c) Negotiations remain open and are ongoing between MTO and Recluse. <p>Property 149 – Hedley – 887 Putty Road Mount Thorley</p> <ul style="list-style-type: none"> AUR Request letter dated 12/10/22 Offer tabled 27 February 2023. During the 3 months there was dialogue between MTO (via Costello Group) and Hedley together with dialogue between MTO (via Minter Ellison lawyers) to Sparke Helmore lawyers (on behalf of Hedley) In the ongoing discussions with Hedley since there has been no issues raised in regard to the timing of any offer. Negotiations remain open and are ongoing between MTO and Hedley. <p>Neither property is in dispute</p>		<p>Yancoal have been approached by the owners of two properties identified in Table 1. These are:</p> <ul style="list-style-type: none"> Property 149(Noise) Property K (Air) <p>Notices were issued in late 2022. The acquisition process will take some time, discussions with both property owners are ongoing. As such these properties are yet to be acquired by Yancoal. Neither acquisitions are in dispute.</p>	Complies				
									Table 1	Acquisition Basis	Land
										Noise	144, 146, 149, 915
		Air	K								
S3 C2	Noise Criteria	From 1 January 2017, except for the land in Table 1, the Applicant must ensure that the noise generated by the Development does not exceed the noise criteria in Table 3 at any residence on privately owned land.	<p>Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021</p> <p>Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022</p> <p>Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023</p>			<p>Section 6.2.2/3 of each Annual Review presents the results of the noise monthly noise monitoring undertaken by independent consultants.</p> <p>A summary of compliance is as follows:</p> <ul style="list-style-type: none"> 2020 – no non compliances reported 2021 - no non compliances reported 2022 – no exceedances of the noise criteria were recorded. 	Complies				

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Cond	Title	Condition	Documents Reviewed	Interviews	Audit Inspections		Assessment	Finding	Recommendations
S3 C2	Table 3	<i>Location</i>	<i>Land</i>	<i>Day (LAeq (15min))</i>	<i>Evening (LAeq (15min))</i>	<i>Night (LAeq (15min))</i>	<i>Night (LA1(1min))</i>		
		<i>Bulga</i>	75	40	40	40	50		
			42, 53, 55, 56, 58, 60, 62, 63, 64, 66, 71, 72, 73, 82, 210, 211, 236, 252, 920	39	39	39	49		
			16, 187, 19, 21, 24, 31, 35, 36, 37, 40, 41, 44, 45, 46, 47, 48, 49, 50, 52, 54, 61, 67, 70, 74, 80, 84, 89, 215, 234, 235, 237, 238, 243, 254, 903, 917, 918, 919, 921, 929	38	38	38	48		
			18, 20, 22, 23, 26, 28, 38, 39, 230, 231, 253, 921, 922	37	37	37	47		
			412, 14, 125, 226, 227, 228, 229, 909, 928, 936	36	36	36	46		
			All other residences on private land	35	35	35	45		
		<i>Mibrodale</i>	111	37	37	37	47		
			All other residences on private land						
		<i>Warkworth</i>	All other residences on private land						
		<i>Maison Dieu</i>	All other residences on private land						
		<i>Gouldsville, Long Point</i>	126, 262	38	38	38	48		
			All other residences on private land	35	35	35	45		
		<i>Hambleton Hill / Wyles Flat</i>	All other residences on private land	35	35	35	45		
		<i>Mt Thorley</i>	148	39	39	39	49		
			190	38	38	38	48		
	150	37	37	37	47				
	All other residences on private land	35	35	35	45				
S3 C3	Additional Mitigation on Request	Upon receiving a written request from the owner of any residence on the land listed in Table 1 or Table 2, the Applicant must implement additional noise and /or air quality mitigation measures at or in the vicinity of the residence in consultation with the landowner. These measures must be consistent with the measures outlined in the Voluntary Land Acquisition and Mitigation Policy. They must also be reasonable and feasible and proportionate with the level of predicted impact.	Mitigation Management spreadsheet, September 2020				There were no written requests for mitigation during the audit period. A spreadsheet of mitigations has been developed that includes the measures that have been implemented including contact details as well as measures implemented at each property including air conditioning systems and solar systems.	Complies	
		If within 3 months of receiving this request from the owner, the Applicant and the Owner cannot agree in the measures to be implemented, or there is a dispute about the implementation of these measures, then either party may refer to matter to the planning secretary for resolution.		Environment and Community Manager – there have been no property related disputes during this audit period.			There have been no disputes referred to the Planning Secretary for Resolution.	Not Triggered	
	Table 3	<i>Mitigation Basis</i>	<i>Characterisation of Impact</i>	<i>Land</i>					
	Noise	Moderate	148, 190						

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Cond	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations	
S3 C4	Operating Conditions Noise	<p>The Applicant must:</p> <p>a) implement all reasonable and feasible measures to minimise the operational, low frequency and road noise of the development;</p>	<p>Noise Management Plan, Mt Thorley Warkworth, Rev 5.2 dated 8 August 2022</p> <p>Thearle Engineering, Sound Power Determination, Mobile Machinery CAT D10T2 Dozer, Serial Number RAB01006 Ful Sound Kit, 25 June 2021</p> <p>Thearle Engineering, Sound Power Determination, Mobile Machinery CAT D10T2 Dozer, Serial Number KSN00309 Ful Sound Kit, 25 June 2021</p> <p>Caterpillar MD 6250 Unit 231, Sound Power Assessment, Westrac Pty Ltd Global Acoustics 7 May 2023</p> <p>Hitachi EH5000-AC3 Mount Thorley Warkworth, Sound Power by sound pressure level assessment, Hitachi Construction Machinery (Australia) Pty Ltd, 16 April 2020</p>		Operating mining plant was observed during the site inspection.	<p>As observed during the site inspection several mitigation measures have been implemented on site including noise attenuation on items of plant and equipment, no reversing beepers used (non-tonal reversing alarms instead), regular service inspections and site induction.</p> <p>Noise testing of items of plant and equipment including Dozers, Drills, Trucks, water carts are undertaken by a specialist consultant with records kept by the project team.</p> <p>In addition, a comprehensive noise monitoring and complaints management system has been implemented.</p>	Complies		
		<p>b) operate a comprehensive noise management system on suite 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 consent;</p>	<p>Noise Management Plan, Mt Thorley Warkworth, Rev 5.2 dated 8 August 2022</p> <p>Complaints Register</p>	<p>Environment and Community Manager- A noise enhancement report is generated each night indicating predictive noise enhancement for the coming night shift.</p> <p>The Community Response Officers' work instructions includes a review of the noise enhancement report.</p>		<p>6.3.5 of the Noise Management Plan describes the proactive noise mitigation processes implemented my MTW. "An assessment of (weather) forecast information at the commencement of each night shift identifies likely direction of meteorological enhancement of noise (if any). MTW has developed a simple noise enhancement prediction tool that uses WRF forecast data to predict source to receptor sonic gradients for the key noise propagation pathways from MTW to nearby sensitive receptors.</p> <p>Handheld noise monitoring is undertaken on a proactive basis in neighbouring communities on a night-to-night basis, as well as in response to triggers and complaints".</p> <p>The Auditor sighted complaints records that demonstrated that this system was operating.</p>	Complies		
		<p>c) minimise the noise impacts of the development during meteorological conditions when the noise limits in this consent do not apply (see Appendix 7); and</p>	<p>Noise Management Plan, Mt Thorley Warkworth, Rev 5.2 dated 8 August 2022</p> <p>Complaints Register</p>	<p>Environment and Community Manager- A noise enhancement report is generated each night indicating predictive noise enhancement for the coming night shift.</p> <p>The Community Response Officers' work instructions includes a review of the noise enhancement report.</p>				Complies	
		<p>d) ensure that;</p> <ul style="list-style-type: none"> all new trucks, dozers, drills and excavators purchased for use on the site after the date of this consent are commissioned as noise suppressed (or attenuated) units; and the existing fleet of trucks, dozers, drills and excavators on site at the date of this approval is progressively fitted with suitable noise attenuation packages to ensure that 100% of the fleet being used on site is attenuated by the end of 2016; and 	<p>Thearle Engineering, Sound Power Determination, Mobile Machinery CAT D10T2 Dozer, Serial Number RAB01006 Ful Sound Kit, 25 June 2021</p> <p>Thearle Engineering, Sound Power Determination, Mobile Machinery CAT D10T2 Dozer, Serial Number KSN00309 Ful Sound Kit, 25 June 2021</p> <p>Caterpillar MD 6250 Unit 231, Sound Power Assessment, Westrac Pty Ltd Global Acoustics 7 May 2023</p> <p>Hitachi EH5000-AC3 Mount Thorley Warkworth, Sound Power by sound pressure level assessment, Hitachi Construction Machinery (Australia) Pty Ltd, 16 April 2020</p>	<p>Environment and Community Manager – All HME was fitted with noise attenuation by the end of 2016</p> <p>All new HME is required to have noise attenuation fitted as part of the contract to purchase the equipment</p>		Examples of noise attenuation on items of plant and equipment were observed during the site inspection	<p>Appropriate noise attenuation measures were installed on plant and equipment with testing undertaken to ensure ongoing compliance.</p>	Complies	

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Cond	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
S3 C4	Operating Conditions Noise	e) carry out regular monitoring to determine whether the development is complying with the relevant conditions of this consent and, if necessary, adjust the scale of operations on site to meet the criteria in this consent	Insite Yancoal Australia			A comprehensive network of noise monitors has been established with monitoring results reported on the MTW website (Insite). The website provides details of any operational changes made due to excessive noise.	Complies	
S3 C5	Noise Management Plan	The Applicant must prepare a Noise Management Plan for the development to the satisfaction of the Planning Secretary and carry out the development in accordance with this plan.	Letter from Yancoal (G. Mulhearn) to EPA (N Ryan) titled "Yancoal, Mt Thorley Warkworth EPA Consultation on Noise, Air Quality Blasting and Water Management Plan" dated 18 July 2018 Letter from EPA (N Ryan) to Yancoal (G Mulhearn) titled Environment Protection Licences 1376 and 1976 Environmental Management Plans" dated 19 July 2018			During the audit period, the NMP was updated with version 5.2 of the NMP approved by DPE on the 8 th of August 2022. 2022 Annual Review prepared by MTW reported a non-compliance against this condition due to exceedances of noise criteria during that audit period. However, it is noted that this should have been recorded against condition S3 C2.	Complies	
		The plan must: a) be prepared in consultation with the EPA, and submitted to the Planning Secretary for approval prior to the commencement of any development under this consent;	Independent Environmental Audit Report for Yancoal Mount Thorley Warkworth, Hansen Bailey, July 2020			The noise management plan was issued to EPA on 18 th July 2018 for consultation. The EPA did not provide any comments, noting it is not their role to review such plans. Appendix C of the NMP includes the correspondence with the EPA. 2020 Audit viewed the Secretary's Approval of the Plan dated 28 August 2018	Complies	
		b) describe the measures that would be implemented to ensure compliance with the relevant noise criteria and operating conditions of this consent;	Noise Management Plan, Mt Thorley Warkworth, Rev 5.2 dated 8 August 2022			Section 6 of the NMP	Complies	
		c) describe the proposed noise management system in detail;	Noise Management Plan, Mt Thorley Warkworth, Rev 5.2 dated 8 August 2022			Section 8.1.3 of the NMP	Complies	
		d) include provisions for keeping the local community informed about the operation of the noise management system and monitoring programs (including any correction factors under the NSW Industrial Noise Policy), including regular briefings and a public information session within 6 months of granting this development consent;	Noise Management Plan, Mt Thorley Warkworth, Rev 5.2 dated 8 August 2022			Appendix A of the NMP	Complies	
		e) include a noise monitoring program that: <ul style="list-style-type: none"> •evaluates and reports on: <ul style="list-style-type: none"> - the effectiveness of the noise management system and the noise attenuation program (see condition 6(d)); - compliance against the noise criteria in this consent and the noise operating conditions; • includes a program to calibrate and validate the real-time noise monitoring results with the attended monitoring results over time (so the real-time monitoring program can be used as a trigger for further attended monitoring where there is a risk of non-compliance 	Noise Management Plan, Mt Thorley Warkworth, Rev 5.2 dated 8 August 2022			Appendix A of the NMP	Complies	

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Cond	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
		with the Noise criteria in this consent); and • defines what constitutes a noise incident and includes a protocol for identifying and notifying the Department and relevant stakeholders of any noise incidents.						
S3 C6	Blasting Criteria	The Applicant must ensure that the blasting on the site does not cause exceedances of the criteria in Table 4. These criteria do not apply if the Applicant has a written agreement with the relevant owner.	Blasting Records – 2020 Blasting Records – 2021 Blasting Records – 2022 Blasting Records – 2023				No blast exceedances were recorded during the audit period.	Complies
	Table 4	Location	Airblast overpressure dB (LinPeak)	Ground Vibration (mm/s)	Allowable Exceedance			
		Residence on Privately owned land	120	10	0%			
			115	5	5% of total number of blasts over a period of 12 months			
S3 C7	Blasting Hours	The Applicant must only carry out blasting on site between 7am and 5pm Monday to Saturday inclusive. No blasting is allowed on Sundays, public holidays, or at any other time without the written approval of the Planning Secretary.	Blasting Records – 2020 Blasting Records – 2021 Blasting Records – 2022 Blasting Records – 2023	Environment and Community Manager – all blasts occurred within permitted times			The detailed records show the time and dates for each blast. Samples of the blasting data confirms compliance.	Complies
S3 C8	Blasting Frequency	The Applicant may carry out a maximum of: a) 2 blasts a day; and	Blasting Records – 2020 Blasting Records – 2021 Blasting Records – 2022 Blasting Records – 2023	Environment and Community Manager – all blasts occurred within permitted times			The records maintained demonstrate that a maximum of two blasts have been made the site.	Complies
		b) 6 blasts a week, averaged over a calendar year, at the site.	Blasting Records – 2020 Blasting Records – 2021 Blasting Records – 2022 Blasting Records – 2023	Environment and Community Manager – all blasts occurred within permitted times			The number of blasts undertaken for each year are as follows: • 2020 –13, and 0.25 per week • 2021 - 0 and 0 per week • 2022 - 0 and 0 per week • 2022 - 0 and 0 per week (YTD)	Complies
S3 C9	Blasting Frequency	The Applicant must not carry out more than 1 blast a day within 500 metres of the Putty Road.	Mount Thorley Warkworth, Weekly Blasting Overviews for Year 2020 Mount Thorley Warkworth, Weekly Blasting Overviews for Year 2021 Mount Thorley Warkworth, Weekly Blasting Overviews for Year 2022 Mount Thorley Warkworth, Weekly Blasting Overviews for Year 2023 Blast Crew Weekly Schedule Updates	Environment and Community Manager –All blasts within 500m of Putty Rd / or Golden Highway require a road closure to maintain the required blast exclusion zone.			Blast exclusion maps 2020-2023 showing 300-500m exclusion zone. This identifies features that need management including public road closures, and infrastructure within 500m exclusion zone. -Weekly blast schedules – shows the likely road closures required for upcoming week. A sample of blast exclusion maps and weekly exclusion maps was reviewed that confirmed compliance with this requirement.	Complies

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Cond	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
S3 C10	Property Inspections	If the Applicant receives a written request from the owner of any privately-owned land within 2 kilometres of the approved open cut mining pit/s on site for a property inspection to establish the baseline condition of any buildings and/or structures on his/her land, or to have a previous property inspection updated, then within 2 months of receiving this request the Applicant must:		Environment and Community Manager- No baseline property inspections requested during the audit period			Not triggered, no baseline property inspections were triggered during the audit period.	Not triggered
		a) Commission a suitably qualified, experienced and independent person, whose appointment is acceptable to both parties to: <ul style="list-style-type: none"> establish the baseline condition of any buildings and other structures on the land, or update the previous property inspection report; and identify measures that should be implemented to minimise the potential blasting impacts of the project on these buildings and/or structures; and 		Environment and Community Manager- No baseline property inspections requested during the audit period			Not triggered, no baseline property inspections were triggered during the audit period.	Not triggered
		b) give the landowner a copy of the new or updated property inspection report.		Environment and Community Manager- No baseline property inspections requested			Not triggered, no baseline property inspections were triggered during the audit period.	Not triggered
		If there is a dispute over the selection of the suitably qualified, experienced and independent person, or the Applicant or the landowner disagrees with the findings of the property inspection report, either party may refer to the Planning Secretary for resolution.		Environment and Community Manager- No disputes with property owners have occurred during the audit period			Not triggered, nil disputes with property owners have occurred	Not triggered
S3 C11	Property investigations	If the owner of any privately-owned land claims that buildings and/or structures on his/her land have been damaged as a result of blasting on the site, then within 2 months of receiving this claim the Applicant must:		Environment and Community Manager- No new claims have been made during the audit period			Not triggered, Nil new claims have been made during the audit period	Not triggered
		commission a suitably qualified, experienced and independent person, whose appointment is acceptable to both parties to investigate the claim; and		Environment and Community Manager- Nil new claims have been made during the audit period			Not triggered, Nil new claims have been made during the audit period	Not triggered
S3 C11	Property investigations	give the landowner a copy of the property investigation report.		Environment and Community Manager- Nil new claims have been made during the audit period			Not triggered, Nil new claims have been made during the audit period	Not triggered
		If this independent property investigation confirms the landowner's claim, and both parties agree with these findings, then the Applicant must repair the damage to the satisfaction of the Planning Secretary. If there is a dispute over the selection of the suitably qualified, experienced and independent person, or the Applicant or the landowner disagrees with the findings of the independent property investigation, then either party may refer the matter to the Planning Secretary for resolution		Environment and Community Manager- Nil new claims have been made during the audit period			No new requests for property inspections were received during the audit period.	Not triggered

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Cond	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
S3 C12	Operating Conditions Blasting	During mining operations on site, the Applicant must: a) implement all reasonable and feasible measures to: • protect the safety of people and livestock in the surrounding area; • protect public or private infrastructure/property in the surrounding area from any damage; and • minimise the dust and fume emissions of any blasting;	Blast Management Plan Details on any blast related incidents impacting people or property during this audit period.	Environment and Community Manager- Nil blast related incidents during the audit period		One hundred and sixty-two blast related complaints were received during the audit period. A review of the detailed complaints register indicated that those complaints were associated with blast noise and/or vibration, however no property damage was reported. One blasting incident was recorded during the audit period. No evidence of personal injuries or property damage were recorded during this audit period.	Complies	
		b) Ensure that blasting on the site does not damage historic heritage	Details of any damage from blasting to these items during this audit period.	Environment and Community Manager- Nil known damage during the audit period, noting that grinding groove M was relocated to avoid impact			Complies	
		c) minimise the frequency and duration of any road closures, and	Mount Thorley, Warkworth – Road Closure Checklist dated 18 April 2023 Mount Thorley, Warkworth – Road Closure Checklist dated 28 April 2023	Environment and Community Manager- the road closure record is a form kept by the road closure supervisor. The road closure form includes the start and stop time of the actual road closure. The Blast Weekly Schedule provides a forecast for the following week where a road closure may be required for the upcoming blasts. Sometimes road closures may be planned, but not enacted due to weather conditions for example.		Road closures are planned and managed, with a checklist kept of road closure activities.	Noted	
		d) operate a suitable system (including a hotline and website updates) to enable the public to get up-to-date information on the proposed blasting schedule on site.	Blast Management Plan, Mount Thorley Warkworth, Revision 5.2 dated 10/2/2023. MTW Website			Section 5.2.4 of the Blast Management Plan describes the process for public notification of the blasting schedule and includes the operation of a telephone update line and information posted on the MTW website.	Complies	
S3 C13	Operating Conditions Blasting	The Applicant must not undertake blasting on site within 500 metres of: (a) any public road; or (b) any land outside the site that is not owned by the Applicant, unless: • the Applicant has a written agreement with the applicable infrastructure authority or landowner to allow blasting to be carried out closer to the infrastructure or land, and the Applicant has advised the Department in writing of the terms of this agreement; or • the Applicant has: - demonstrated to the satisfaction of the Planning Secretary that the blasting can be carried out closer to the infrastructure or land without compromising the safety of people or livestock, or damaging buildings and/or structures; and - updated the Blast Management Plan to include the specific measures that would be implemented while blasting is being carried out within 500 metres of the road or land.	Blast Management Plan, Mount Thorley Warkworth, Revision 5.2 dated 10/2/2023	Environment and Community Manager - blasts have been conducted within 500m of Public Road from time to time during the audit period. Road closures are enacted in accordance with the Road Closure Management Plan. -At NOOP, blasts are conducted within 500m of infrastructure (Public Road (Golden Hwy), Ausgrid transmission lines). NOOP blast impact monitoring plan also undertaken and recorded. -Crown Land – MTW holds the grazing licence for this lot within 500m of WML		BMP includes approvals for road closures on the Council or TfNSW owned roads surrounding the mine in the BMP Appendix – Road Closure Management Plan.	Complies	

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Cond	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations	
S3 C14	Blast Management Plan	<p>The Applicant must prepare a Blast Management Plan for the development to the satisfaction of the Planning Secretary and carry out the development in accordance with this plan. This plan must:</p> <p>a) be prepared in consultation with the EPA, and submitted to the Planning Secretary for approval prior to carrying out any development under this consent;</p>	<p>Blast Management Plan, Mount Thorley Warkworth, Revision 5.2 dated 10/2/2023</p> <p>Letter from Yancoal (G. Mulhearn) to EPA (N Ryan) titled "Yancoal, Mt Thorley Warkworth EPA Consultation on Noise, Air Quality Blasting and Water Management Plan" dated 18 July 2018</p> <p>Letter from EPA (N Ryan) to Yancoal (G Mulhearn) titled Environment Protection Licences 1376 and 1976 Environmental Management Plans" dated 19 July 2018</p> <p>Independent Environmental Audit Report for Yancoal Mount Thorley Warkworth, Hansen Bailey, July 2020</p> <p>Letter from DPE (J. Fittell) to Warkworth Mining Limited (G Mulhearn) titled "Approval of Warkworth Continuation Project Blast Management Plan" dated 24 March 2023</p>				<p>The blast management plan was updated during the audit period (administrative updates and approved on the 24 March 2023. DPE noted in their approval that consultation with the relevant parties (as detailed in this condition) was not required due to the administrative nature of the updates</p>	Complies	
		<p>b) describe the measures that would be implemented to ensure compliance with the blasting criteria and operating conditions of this consent;</p>					Appendix D of the BMP	Complies	
		<p>c) include a road closure management plan for blasting within 500 metres of a public road, that has been prepared in consultation with the RMS and Council;</p>					Appendix D of the BMP	Complies	
		<p>d) include a monitoring program for evaluating the performance of the development, including:</p> <ul style="list-style-type: none"> • compliance with the applicable criteria; • avoiding any blasting impacts on the historic heritage items referred to in condition 12 above; and • minimising the fume emissions from the site. 					Appendix E of the BMP	Complies	

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Cond	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
S3 C15	Air Quality Impact Assessment Criteria	Except for the land in Table 1, the Applicant must ensure that all reasonable and feasible avoidance and mitigation measures are employed so that particulate matter emissions generated by the development do not cause exceedances of the criteria listed in Tables, 5, 6, and 7 at any residence on privately owned land.	Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023		Measures to minimise dust observed on site included the operation of water carts, designated haul roads, rehabilitation of exposed areas (to provide ground cover and minimise dust generation), air monitoring, weather monitoring and stoppage of work (as reported in Annual Reviews) during unfavorable meteorological conditions	The Auditor's observations during the site inspection verified that the AQMP was being implemented. The 2021 Annual Review reported compliance with all short term and annual average air quality criteria. A total of 1,526 hours of mine stoppage was recorded following implementation of proactive and reactive measures to minimise dust and ensure compliance with air quality criteria. The 2021 Annual Review reported compliance with all short term and annual average air quality criteria. A total of 1,459 hours of mine stoppage was recorded following implementation of proactive and reactive measures to minimise dust and ensure compliance with air quality criteria. The 2022 Annual Review reported compliance with all short term and annual average air quality criteria with a total of 866 hours of mine stoppage recorded following pro-active and re-active measures to minimise dust and ensure air quality criteria.	Complies	
	Table 5	Pollutant	Averaging Period	Criterion				
		Total Suspended Solids (TSP) matter	Annual	90 ug/m ³				
		Particulate matter < 10um (PM ₁₀)	Annual	30 ug/m ³				
	Table 6	Pollutant	Averaging Period	Criterion				
	Particulate matter < 10um (PM ₁₀)	24 Hour	50 ug/m ³					
Table 7	Pollutant	Averaging Period	Criterion					
	Deposited Dust	Annual	Max Increase	Max Total Dust Deposited				
			2 g/m2/month	4 g/m2/month				
S3 C16	Mine Owned Land	The Applicant must ensure that all reasonable and feasible avoidance and mitigation measures are employed so that particulate matter emissions generated by the development do not cause exceedances of the criteria listed in Tables 5, 6 and 7 at any occupied residence on mine-owned land (including land owned by another mining or petroleum company, unless and to the extent that:	Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023 Air Quality Management Plan, Mt Thorley Warkworth, Rev 4.1 dated 28 July 2022		Measures to minimise dust observed on site included the operation of water carts, designated haul roads, rehabilitation of exposed areas (to provide ground cover and minimise dust generation), air monitoring, weather monitoring and stoppage of work (as reported in Annual Reviews) during	The 2021 Annual Review reported compliance with all short term and annual average air quality criteria. A total of 1,526 hours of mine stoppage was recorded following implementation of proactive and reactive measures to minimise dust and ensure compliance with air quality criteria. The 2021 Annual Review reported compliance with all short term and annual average air quality criteria. A total of 1,459 hours of mine stoppage was recorded following implementation of proactive and reactive measures to minimise dust and ensure compliance with air quality criteria. The 2022 Annual Review reported compliance with all short term and annual average air quality criteria with a total of 866 hours of mine stoppage recorded following pro-active and re-active measures to minimise dust and ensure air quality criteria.	Complies	
		the tenant and landowner by another mining or petroleum company) have been notified of any health risks associated with such exceedances in accordance with the notification requirements under schedule 4 of this consent;	Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023			No exceedances of dust criteria were reported during the audit period.	Not Triggered	
		the tenant of any land owned by the Applicant can terminate their tenancy agreement without penalty at any time, subject to giving reasonable notice and cause;	Noted				Residential tenancy agreements provide details of early termination without penalty (Clause 18).	Noted

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Cond	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations	
S3 C16	Mine Owned Land	a) air quality monitoring is regularly undertaken to inform the tenant or landowner (if the residence is owned by another mining or gas company) of the particulate emissions at the residence; and	Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023			No exceedances of dust criteria were reported during the audit period.	Not Triggered		
		b) data from this monitoring is presented to the tenant and landowner in an appropriate format for a medical practitioner to assist the tenant and landowner in making informed decisions on the health risks associated with occupying the property.	Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023			No exceedances of dust criteria were reported during the audit period.	Not Triggered		
S3 C17	Operating Conditions Air Quality	The Applicant must: a) implement all reasonable and feasible measures to minimise the: • odour, fume and dust emissions of the development; and • release of greenhouse gas emissions from the development;	Air Quality Management Plan, Mt Thorley Warkworth, Rev 4.1 dated 28 July 2022 Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023			During the site inspection, the Auditor observed water carts in operation. The auditor noted, however, that minor levels of dust was being generated within the operating open cut and on haul roads, and in areas that were being stripped in preparation for mining, although not evidence that visual dust was leaving the site at the time of the site inspection. Significant areas of the site have been cleared and progressive rehabilitation works are behind schedule. The Auditor also observed significant areas, that while not ready for final rehabilitation, would benefit from temporary stabilisation to help reduce dust emissions during adverse wind conditions.	The Air quality management plan describes the air quality management system and procedures including the predictive tools. Fifty-eight dust-related complaints were received during the audit period. No exceedances in dust criteria were reported during the audit period. Areas of the site are being cleared in preparation for mining, and the disposal of overburden is progressing. The planned progressive rehabilitation works are, however, behind schedule. The Auditor also observed areas, that while not ready for final rehabilitation, would benefit from temporary stabilisation to help reduce dust emissions during adverse wind conditions	Non-compliant	Increase the rate of progressive rehabilitation works with the objective of meeting the established progressive rehabilitation targets. Prepare and implement a program for the stabilisation of unsealed / disturbed areas of the site including stockpiles, finished landforms, and disturbed areas that are not currently being actively worked / filled). The program should identify and classify all areas of the site that are currently disturbed according to the dust generation potential of those areas and establish clear targets for the stabilisation of those areas (either permanent or temporary) with the objective of meeting the requirements of the Blue Book.
		b) operate a comprehensive air quality management system that uses a combination of predictive meteorological forecasting and real-time air quality monitoring data to guide the day-to-day planning of mining operations and the implementation of both proactive and reactive air quality mitigation measures to ensure compliance with the relevant conditions of this consent;	Air Quality Management Plan, Mt Thorley Warkworth, Rev 4.1 dated 28 July 2022					Complies	
		c) minimise the air quality impacts of the development during adverse meteorological conditions and extraordinary events (see note d to Tables 5-7 above); and	Air Quality Management Plan, Mt Thorley Warkworth, Rev 4.1 dated 28 July 2022 Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023					Non-compliant	See Condition S3 C17a above

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Cond	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
		d) co-ordinate the air quality management on site with the air quality management at nearby mines (including the Mt Thorley, Bulga, Wambo and Hunter Valley Operations mines) to minimise any cumulative air quality impacts	Air Quality Management Plan, Mt Thorley Warkworth, Rev 4.1 dated 28 July 2022 Inter mine meeting minutes dated 29 June 2023 Email from Yancoal (G Mulhearn) to Peabody Wambo Coal dated February 8 2023.	Environment and Community Manager - interactions on day to day observations regarding emissions from other mines are typically done by phone call – not often required at inspection locations of CROs, as these inspections are close to MTW operations.		Section 3.2 describes how MTW coordinate air quality management with the neighbouring mines. Evidence of interaction and coordination was provided and included inter mine coordination meeting minutes.	Complies	
S3 C18	Air Quality Management Plan	The Applicant must prepare a detailed Air Quality Management Plan for the development to the satisfaction of the Planning Secretary, and carry out the development in accordance with this plan. This plan must:	Air Quality Management Plan, Mt Thorley Warkworth, Rev 4.1 dated 28 July 2022 Air Quality Management Plan, Mt Thorley Warkworth, Rev 4.1 dated 28 July 2022 Letter from Yancoal (G. Mulhearn) to EPA (N Ryan) titled “Yancoal, Mt Thorley Warkworth EPA Consultation on Noise, Air Quality Blasting and Water Management Plan” dated 18 July 2018 Letter from EPA (N Ryan) to Yancoal (G Mulhearn) titled Environment Protection Licences 1376 and 1976 Environmental Management Plans” dated 19 July 2018 Independent Environmental Audit Report for Yancoal Mount Thorley Warkworth, Hansen Bailey, July 2020 Letter from DPE (J Fittell) to Yancoal (G.Mulhearn) titled “Mt Thorley Continuation Project (SSD -6465) and Warkworth Continuation Project SSD (6464) dated 8 August 2022			The AQMP was updated during this audit period and approved by DPE on the 8th of August 2022. The EPA, in 2018 elected to not provide comments on the air quality management plan	Complies	
		b) describe the measures that would be implemented to ensure compliance with the relevant air quality criteria and operating conditions of this consent;	Air Quality Management Plan, Mt Thorley Warkworth, Rev 4.1 dated 28 July 2022 Independent Environmental Audit Report for Yancoal Mount Thorley Warkworth, Hansen Bailey, July 2020			Section 5 and 6 of the AQMP describes management and mitigation measures to ensure compliance with criteria	Complies	
		c) describe the project air quality management system;	Air Quality Management Plan, Mt Thorley Warkworth, Rev 4.1 dated 28 July 2022			Section 5 and 6 of the AQMP	Complies	
		d) include provisions for keeping the local community informed about the operation of the air quality management system and monitoring programs, including regular briefings and a public information session within 6 months of the granting of this development consent;	Air Quality Management Plan, Mt Thorley Warkworth, Rev 4.1 dated 28 July 2017 Independent Environmental Audit Report for Yancoal Mount Thorley Warkworth, Hansen Bailey, July 2020			Section 8 of the AQMP	Complies	
		e) include an air quality monitoring program that: • adequately supports the proactive and reactive air quality management system; • evaluates and reports on: - the effectiveness of the air quality management system; and - compliance against the air quality	Air Quality Management Plan, Mt Thorley Warkworth, Rev 4.1 dated 28 July 2022 Independent Environmental Audit Report for Yancoal Mount Thorley Warkworth, Hansen Bailey, July 2020			Section 7 and Appendix A of the AQMP describes the air quality monitoring program.	Complies	

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Cond	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
		operating conditions; and <ul style="list-style-type: none"> defines what constitutes an air quality incident, and includes a protocol for identifying and notifying the Department and relevant stakeholders of any air quality incidents; and 						
S3 C18	Air Quality Management Plan	f) include a protocol that has been prepared in consultation with the owners of nearby mines (including the Warkworth, Bulga, Wambo and Hunter Valley Operations) to minimise the cumulative air quality impacts of these mines and the development.	Air Quality Management Plan, Mt Thorley Warkworth, Rev 4.1 dated 28 July 2022	Manager Environment and Community - Current version of the AQMP is v4.1 (approved 8/8/2022). Changes to the AQMP since the last audit have occurred for v4.0 (approved 20/7/21), which included the detail of the inter-site communications protocol.			Section 3.2 of the AQMP addresses cumulative impacts and the details of the site protocol	Complies
S3 C19	Meteorological Monitoring	For the life of the development, the Applicant must ensure that there is a meteorological station in the vicinity of the site that: a) complies with the requirement in the Approved Methods for Sampling of Air Pollutant in New South Wales guidelines; and	Monthly Maintenance Records – Charlton Ridge Met Station, 9 March 2021 Benchmark Monitoring Calibration Records for Solar Radiation, Relative Humidity, Wind Direction, Wind Speed and Type, Ambient Temperature, Rain Gauge and Wind Sensor		Weather Station		Calibration certificates confirm compliance with AS3580.	Complies
		b) is capable of continuous real-time measurement of temperature inversions in accordance with the NSW Industrial Noise Policy, unless a suitable alternative is approved by the Planning Secretary following consultation with the EPA.	Monthly Maintenance Records – Charlton Ridge Met Station, 9 March 2021				Monitoring records demonstrate that the met station provides real time continuous monitoring.	Complies
S3 C20	Water Supply	The Applicant must ensure that is has sufficient water for all stages of the development, and if necessary, adjust the scale of mining operations to match its available water supply.	Water Management Plan, Mt Thorley Warkworth, Rev 5.2 dated 31 October 2021.				There were no water supply issues during this audit period. Rainfall during this period was well above average. Section 6 of the water management plan provides details of water management activities to ensure adequate supply of water. This includes sources and security of water supply, water sharing with neighboring mines, off site water transfer and discharges.	Complies

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Cond	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
S3 C21	Compensatory Water Supply	<p>The Applicant must provide a compensatory water supply to the owner of any privately-owned land whose basic landholder water rights as defined in the Water Management Act 2000 are adversely and directly impacted as a result of the development. This supply must be provided in consultation with NRAR, and to the satisfaction of the Planning Secretary.</p> <p>The compensatory water supply measures must provide an alternative long-term supply of water that is equivalent to the loss attributable to the development. Equivalent water supply should be provided (at least on an interim basis) as soon as practicable from the loss being identified, unless otherwise agreed with the landowner.</p> <p>If the Applicant 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 Planning Secretary for resolution.</p> <p>If the Applicant is unable to provide an alternative long-term supply of water, the Applicant must provide alternative compensation to the satisfaction of the Planning Secretary.</p>		Environment and Community Manager – none were required during the audit period.		Compensatory water supplies were not required during the audit period	Not triggered	
S3 C22	Water Discharges	<p>Unless an EPL or the EPA authorises otherwise, the Applicant must ensure that all surface water discharges from the site comply with the:</p> <p>a) discharge limits (both volume and quality) set for the development in any EPL; and</p>	<p>Annual Return (AR) Non-Compliance Detail Licence Number 1376, 01 Dec 2021 – 30 November 2022 (EPA Website)</p> <p>Annual Return Non-Compliance Detail Licence Number 1376, 01 Dec 2020 – 30 November 2021 (EPA Website)</p> <p>Annual Return Non-Compliance Detail Licence Number 1376, 01 Dec 2019 – 30 November 2020 (EPA Website).</p>			<p>The following non-compliances were identified by the Annual Returns</p> <ul style="list-style-type: none"> • Dam 1S overtopped as a result of heavy or sustained rainfall which caused significant runoff (2023 AR) • Dam 1S overtopped as a result of heavy or sustained rainfall which caused significant runoff (2021 AR) • Discharge from 9S via spillway to Loders Creek (2021 AR) 	Non-compliant	A risk assessment and review of the storage capacity of the retention dams be undertaken that takes into account the increasing risk of extreme weather events, including extended duration wet weather patterns.
		<p>b) relevant provisions of the POEO Act or Protection of the Environment Operations (Hunter River Salinity Trading Scheme) Regulation 2002</p>	<p>Annual Return – Mt Thorley Operations Pty Limited Licence 1976 (01-04-2019 to 31-03-2020)</p> <p>Annual Return – Mt Thorley Operations Pty Limited Licence 1976 (01-04-2020 to 31-03-2021)</p> <p>Annual Return – Mt Thorley Operations Pty Limited Licence 1976 (01-04-2021 to 31-03-2022)</p>	Environment and Community Manager – HRSTS discharge all < 100ML / day limit reported in Annual Returns (Point 4). All within EPL limits for pH and TSS		As reported in the 2021 Annual Return for EPL 1976, Exceedance of the HRTS hourly volume discharge limit during analysis of flow data following a discharge event. Note that this incident was not reported in the 2021 Annual Review.	Non-compliant	The auditor understands that this discharge was an isolated event and has been investigated. No additional actions are required.
S3 C23	Water Transfers	The Applicant may receive water from, and transfer water to, the Warkworth mine, Hunter Valley Operations mine, Bulga mine and Redbank Power Station.	<p>Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021</p> <p>Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022</p> <p>Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023</p> <p>Water Management Plan, Mt Thorley Warkworth, Rev 5.2 dated 31 October 2021</p>	Environment and Community Manager - Water sharing is noted in Water Management Plan, and in the EPLs for MTO and WML. MTO and WML are operated as a complex for water management. Agreements exist with HVO and Bulga Coal. Transfers are reported in the Annual Review reports. 2022 – 190ML transferred to Bulga Coal.		Noted, each Annual Review details water balances including external water sources	Noted	

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Cond	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations	
S3 C24	Water Management Performance Measures	The Applicant must comply with the performance measures in Table 8 to the satisfaction of the Planning Secretary				Refer to Table 8 below.	Complies		
	Table 8	Feature	Performance Measure						
		Water management – General	Minimise the use of clean water (i.e. water not in contact with disturbed areas) on site Minimise the need for make-up water from external supplies (apart from permissible mine water transfers). Maximise use of mine water	Environment and Community Manager - MTO is quite a static site, with mining operations having reached their limit some time ago. We have contemplated installing a sediment basin on MTO to manage rehabilitation runoff. This is in relation to an incident in January 2021. Sediment basin design report from engineers SLR which sizes the MTO sed basin in accordance with the Managing Urban Stormwater: Soils and Construction including Volume 1. Note that this has not been constructed as we identified a regulatory conflict issue with HRSTS Regulation which would not permit use of sediment dam and runoff to leave site through a sed dam. Nonetheless – this demonstrates our design philosophy in accordance with Blue Book.	MTW operates and integrated water management system which includes clean and dirty water separation systems to minimise contact with disturbance systems.	This commitment is addressed in Sections 5.4-5.6, 7.4.2 and 8.4 WMP Annual water balance includes make up water from other sources.	Complies		
		Construction and operation of infrastructure	Design, install and maintain erosion and sediment controls generally in accordance with the series Managing Urban Stormwater: Soils and Construction including Volume 1, Volume 2A – Installation of Services and Volume 2C – Unsealed Roads Design, install and maintain the infrastructure within 40 m of watercourses generally in accordance with the Guidelines for Controlled Activities on Waterfront Land (DPI 2007), or its latest version Design, install and maintain any creek crossings generally in accordance with the Policy and Guidelines for Fish Habitat Conservation and Management (DPI, 2013) and Why Do Fish Need To Cross The Road? Fish Passage Requirements for Waterway Crossings (NSW Fisheries 2003), or their latest versions		This commitment is included in Table 5.1 of the WMP. Erosion and Sediment controls including sediment dams, clean and dirty water diversions and rehabilitation activities (to provide groundcover and prevent erosion) were installed. WSP have undertaken catchments assessments and have designed in accordance with the Blue Book requirements, thus has been reviewed by a Certified Professional in Erosion and Sediment Control	Complies			
		Clean water diversion & storage infrastructure	Design, install and maintain the clean water system to capture and convey the 100 year ARI flood. Maximise as far as reasonable and feasible the diversion of clean water around disturbed areas on site		This commitment is included in Table 5.1 of the WMP. Clean water diversions were observed on site to prevent interaction with disturbed areas	Complies			
		Sediment dams	Design, install and/or maintain the dams generally in accordance with the series Managing Urban Stormwater: Soils and Construction – Volume 1 and Volume 2E Mines and Quarries		This commitment is included in Table 5.1 of the WMP Sediment dams were installed and appeared to be maintained in accordance with the Blue Book	Complies			
		Mine water storages	Design, install and/or maintain mine water storage infrastructure to ensure no discharge of mine water off-site (except in accordance with condition 24) On-site storages (including mine infrastructure dams and treatment dams) are suitably designed, installed and/or maintained to minimise permeability Maintain adequate freeboard within the pit void at all times to minimise the risk of discharge to surface waters		This commitment is included in Table 5.1 of the WMP.	Complies			
		Flood mitigation measures	Design, install and maintain flood mitigation measures along the western side of the development, to ensure there is adequate freeboard (at least 500mm) between the Probable Maximum Flood level in Wollombi Brook and the crest levee or peak of the flood mitigation infrastructure. Residual impacts downstream must be managed in an appropriate manner.		Community and Environment Manager - A 2016 flood study engaged by Singleton Council by BMT WBM identified the PMF (Extreme Flood) RL as 69.3m at Bulga Bridge, and 62.8m at Warkworth. Figure 9-5 on page 122 of the PDF flood report includes a figure of Design Flood Extents, including the PMF. It is only MTO that shows potential for flood extent reaching the pit. For WML the flood extent is some distance from the pit. Evidence has previously been sought from the BMT WBM that the Charlton Levee is RL 70.5m, and the corresponding PMF level of 70.0m exists in that area.	BMT global (hydrologists) have reviewed the height of the flood level and have confirmed a 500mm freeboard exists between the PMF level and the height of the crest of the flood levee	This commitment is included in Section 7.5.2 of the WMP.	Complies	
		Overburden emplacements	Design, install and maintain emplacements to encapsulate and prevent migration of tailings, acid forming and potentially acid forming materials, and saline and sodic material Design, install and maintain emplacements to prevent off-site migration of saline groundwater seepage				This commitment is addressed in Sections 5.4-5.6, 7.4.2 and 8.4 of the WMP.		
Chemical and hydrocarbon storage	Chemical and hydrocarbon products to be stored in bunded areas in accordance with the relevant Australian Standards		Appropriate bunding was provided around hydrocarbon storage tanks, other fuels and chemicals were observed to be stored in designated chemical storage containers		This commitment is included in Table 5.1 of the WMP. Appropriate bunding was provided around hydrocarbon storage tanks, other fuels and chemicals were observed to be stored in designated chemical storage containers	Complies			
S3 C24	Table 8	Loders Creek	Maintain or improve baseline channel stability and maintain riparian health			This commitment is included in Section 7.5.2 of the WMP and is reported annually in Section 6.7.4 of the Annual Review. Each Annual Review includes a detailed Annual Stream Health and Stability report. The same findings were reported in each annual report as follows: “The majority of Loders Creek displayed stable environments. Generally, the monitoring identified that the creeks have not significantly changed from what was observed during the previous year’s survey”.	Complies		

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Cond	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
S3 C25	Water Management Plan	The Applicant must prepare a Water Management Plan for the development to the satisfaction of the Planning Secretary, and carry out the development in accordance with this plan. The plan must:	Water Management Plan, Mt Thorley Warkworth, Rev 5.1 dated 31 October 2021			The Water Management Plan was revised in 2021.	Complies	
		a) be prepared in consultation with the EPA and NOW, and BCD and submitted to the Planning Secretary for approval prior to carrying out any development under this consent; and	<p>Letter from EPA (N Ryan) to Yancoal (G Mulhearn) titled Environment Protection Licences 1376 and 1976 Environmental Management Plans” dated 19 July 2018</p> <p>Letter from Yancoal (G.Mulhearn) to DPE (M Sprott) titled “Mount Thorley Warkworth updated Water Management Plan” dated 20 December 2019</p> <p>Letter from DPE (M Sprott) to Yancoal (G Mulhearn) titled “Mount Thorley Water Management Plan, dated 13 May 2020</p> <p>Independent Environmental Audit Report for Yancoal Mount Thorley Warkworth, Hansen Bailey, July 2020</p>			<p>There were several revisions of the Water Management Plan approved by DPE during the audit period. These were:</p> <ul style="list-style-type: none"> Version 4.4 (approved by DPE on the 13th of May 2020 Version 5.1 (approved by DPE on the 15 November 2021 <p>The evidence of consultation provided in Appendix A of the WMP covers the previous versions of the plan. The EPA or DPE Water were not consulted during the preparation of the most recent version of the plan or that the plan has been approved by DPE.</p> <p>In their letter dated 20 December 2019, Yancoal requested the agreement of the Secretary to revise the plan without undertaking any consultation with the relevant parties.</p> <p>DPE confirmed the requirement to undertake consultation with DPE and NRAR prior to the next revision of the water management plant and include evidence of the consultation when submitting their revised document.</p>	Complies	
		a) in addition to the standard requirements for management plans (see condition 3 of schedule 5), include a:	<p>Water Management Plan, Mt Thorley Warkworth, Rev 5.1 dated 31 October 2021</p>			<p>Section 6 of the Water Management Plan provides details of water sources (inputs) and water uses (outputs) for the site. These figures have been used to design the water management system, including the sizing of sediment basins. Since 2018 (likely due to the effects of global warming and La Nina) there has been an increase in the frequency and duration of extreme rainfall events, with 2022 one of the wettest years on record. There have been several instances where overtopping of sediment basins may have been due to larger than normal rainfall events resulting in exceedance of design criteria.</p>	Complies	MTW review the water balance model to take into account the impacts of climate, for example the impacts of higher-than-normal rainfall events due to more extreme La-Nina events.

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Cond	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
S3 C25	Water Management Plan	<p>(ii) Surface Water Management Plan, that includes:</p> <ul style="list-style-type: none"> • detailed baseline data on surface water flows and quality in the watercourses that could potentially be affected by the development; • a 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); and - mine water management systems including irrigation areas; • 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 coal reject materials; - 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 development: <ul style="list-style-type: none"> - mine water management system; - surface water quality of Loaders Creek; and - channel stability, stream and riparian vegetation health of Loaders Creek; • a program to monitor and report on: <ul style="list-style-type: none"> - the effectiveness of the mine water management system; and - surface water flows and quality, stream and riparian vegetation health in Loaders Creek potentially affected by the development; • a plan to respond to any exceedances of the performance criteria, and mitigate and/or offset any adverse surface water impacts of the development; and 	Water Management Plan, Mt Thorley Warkworth, Rev 5.1 dated 31 October 2021			Sections 6,7 and 9 of the WMP The requirements of this condition have been satisfied. It is noted however that the Water Management Plan doesn't consider water treated and discharged from the site sewage treatment plant.	Complies	Update the WMP to include water volumes and quality from the STP, as well as any necessary treatment and/or testing
S3 C25	Water Management Plan	<p>(iii) Groundwater Management Plan, which includes:</p> <ul style="list-style-type: none"> • detailed baseline data on groundwater levels, yield and quality in the region, and privately-owned groundwater bores, that could be affected by the development; • groundwater assessment criteria, including trigger levels for investigating any potentially adverse groundwater impacts; • a program to monitor and report on: <ul style="list-style-type: none"> - groundwater inflows to the open cut pits; - the seepage/leachate from water storages, emplacements, backfilled voids, and final voids; - the impacts of the development 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 	Water Management Plan, Mt Thorley Warkworth, Rev 5.1 dated 31 October 2021			Section 8 and 9 of the WMP	Complies	

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Cond	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
		and riparian vegetation; o base flows to Loders Creek; • a plan to respond to any exceedances of the groundwater assessment criteria; and • a program to validate the groundwater model for the development. including an independent review of the model with every independent environmental audit, and • compare the monitoring results with modelled predictions.						
S3 C26	Protection of Heritage Items	Applicant must protect the heritage items identified in Table 1 of Appendix 4.	Salvage Reports Care Agreement			Salvage reports and the Care Agreement were sighted and confirm that MTW has managed indigenous heritage issues in accordance with the requirements of the management plan.	Complies	
S3 C27	Loders Creek Aboriginal Heritage Conservation Area	Within 3 years of the commencement of development under this consent, unless the Planning Secretary agrees otherwise, the Applicant must enter into a conservation agreement or agreements pursuant to section 698 of the National Parks and Wildlife Act 1974 relating to the Loders Creek Aboriginal Cultural Heritage Conservation Area, recording the obligations assumed by the Applicant under the conditions of this consent in relation to the conservation area, and register the agreements pursuant to section 69F of the National Parks and Wildlife Act 1974.	Letter from Yancoal (G. Mulhearn) to DPE (C McNally) titled "Mt Thornley Continuation Project (SSD 6465) – Condition 27, Schedule 3 – Security of the Loders Creek Cultural Heritage Management Plan, Aboriginal Cultural Heritage Management Plan" dated 12 February 2019 Letter from DPE (H Reed) to Yancoal (G. Mulhearn), titled "Mt Thorley Continuation Project SSD 6565) Loders Creek Aboriginal Cultural Heritage Conservation Area" dated 15 February 2019 Conservation Agreement between The Minister and Miller Pohang Coal Company Pty Ltd for Loders Creek Aboriginal Cultural Heritage Conservation Area dated 3 November 2022			The Department approved a request to extend the timeframe for completion of the agreement to the 15th of February 2020, however the agreement was not executed until the 3 November 2022. Whilst the conservation agreement has been entered into in November 2022, registration of the agreements has not been completed pursuant to s69F of the NPW Act.	Non - Compliant	Finalise the registration of the conservation agreement for Loders Creek.
S3 C28	Aboriginal Heritage Management Plan	The Applicant must prepare an Aboriginal Heritage Management Plan for the development to the satisfaction of the Planning Secretary and carry out the development in accordance with this plan. The plan must:	Aboriginal Heritage Management Plan Mt Thorley Warkworth SSD 6464 and 6465 dated 27 July 2022 Letter from DPE (J Fittell) to Warkworth Mining (G Mulhearn) titled "Aboriginal Heritage Management Plan for Mount Thorley Continuation Project (SSD 6465) and Warkworth Continuation Project (SSD 6464) dated 12th August 2022 Loder Creek Aboriginal Cultural Heritage Conservation Area, Plan of Management 2018-2022, V1 19th March 2019 Letter from DPE (H Reed) to Yancoal (G Mulhearn) titled "Mt THorely Continuation Project (SSD 6465) Loders Creek Aboriginal Cultural Heritage dated 19th March 2019			Further review of the plan was undertaken during the audit period with the Department approving Revision 4 of the plan on the 12th of August 2022. An additional plan was prepared for the Loder's Creek conservation area. This was approved by DPE on the 19th of March 2019.	Complies	
		a) be prepared in consultation with BCD and Aboriginal stakeholders. and submitted to the Planning Secretary for approval prior to carrying out any development under this consent;	Aboriginal Heritage Management Plan Mt Thorley Warkworth SSD 6464 and 6465 dated 27 July 2022 Letter from DPE (J Fittell) to Warkworth Mining (G Mulhearn) titled "Aboriginal Heritage Management Plan for Mount Thorley Continuation Project (SSD 6465) and Warkworth Continuation Project (SSD 6464) dated 12th August 2022			A summary of consultation is provided in Section 2 Detailed consultation records with Heritage NSW and Aboriginal Stakeholders are provided in Schedule 18. DPE approved Revision 4 of the Plan on the 12th of August 2022	Complies	

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Cond	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
		b) include a program to: <ul style="list-style-type: none"> • salvage, investigate and/or manage Aboriginal sites and potential archaeological deposits within the project disturbance area; • assess and remove scarred trees within the disturbance area; • protect and monitor Aboriginal sites outside the project disturbance area; • manage the discovery of any new Aboriginal objects or skeletal remains during the development; • facilitate access to archaeological sites on site for Aboriginal stakeholders; and • Aboriginal stakeholders are consulted and involved in the conservation and management of Aboriginal cultural heritage on the site. 	Aboriginal Heritage Management Plan Mt Thorley Warkworth SSD 6464 and 6465 dated 27 July 2022			The AHMP includes a program for the protection and where required salvage of heritage artifacts.	Complies	
		c) Include a research program, that has been prepared by suitable qualified and experienced persons whose appointment has been approved by the Planning Secretary, for locating and evaluating sand bodies of likely early Pleistocene and early Holocene age that may contain evidence of Aboriginal habitation in the Upper Hunter Valley.	Aboriginal Heritage Management Plan Mt Thorley Warkworth SSD 6464 and 6465 dated 27 July 2022			The Hunter Valley Sand Bodies Research Program is referenced in Section 38 of the AHMP and is provided in Schedule 17 of that Plan.	Complies	
S3 C29	Monitoring of Coal Transport	The Applicant must: <ul style="list-style-type: none"> a) keep records of the amount of coal transported from the development in each calendar year; and 	Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023			Table 4.1 of each Annual Review provides details of the amount of coal transported from the project (annually)	Complies	
		<ul style="list-style-type: none"> b) make these records available on its website at the end of each calendar year. 	Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023			The 2020 and 2021 Annual Reviews are publicly available on the MTW website; however, the 2022 Annual Review was not on the website at the time of this IEA. Therefore, the coal transport records for 2022 were not publicly available as required by this Condition. The Auditor notes that the 2022 Annual Review had been submitted to DPE but had not yet been approved.	Non-compliant	Ensure that the coal transportation records are regulatory updated.

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Cond	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
S3 C30	Visual Operating Conditions	<p>The Applicant must:</p> <p>a) implement all reasonable and feasible measures to minimise the visual and off-site lighting impacts of the development, including lighting impacts on road users and impacts of mining voids;</p>	Mt Thorley Warkworth Lighting Review EMM 6 May 2020	<p>Environment and Community Manager – The following information was provided to DPE 24 May 2023 in response to an RFI in May 2023:</p> <ul style="list-style-type: none"> o Progressive rehabilitation is used to minimise visual impact; o MTW uses vegetated bunds, vegetative screening, and screen fencing along the boundary of the site including adjoining public roads; o A lighting assessment review was completed most recently in May 2020 by EMM Consulting, for the purpose of reviewing lighting measures implemented at the site to ensure that their implementation is compliant with the relevant conditions of the approvals. The assessment included field lux measurements and qualitative assessment. The lighting review found that operations at MTW meet the approval requirements. The review found that “no improvements are currently required to address lighting impacts from any of the assessment locations assessed as part of this lighting review. Nonetheless, it is recommended that temporary lighting plant be inspected to ensure that all lighting is directed below the horizontal, where safe to do so.” 		<p>Environmental induction covers lighting. The Lighting review undertaken in 2020 confirms the offsite lighting impacts were meeting the requirements of this condition. However, 90 lighting complaints were received during the audit period. A review of the complaints indicates that the community impacts are from relocatable lighting and mobile plant, but that fixed lighting is not generating complaints. As part of the internal complaint investigations, CROs assess mobile lighting and arrange changes in light locations or direction and that the actions, in general resolve the issues. It is apparent that there is insufficient planning for the location and use of mobile lighting and therefore all reasonable and feasible mitigation measures have not been used.</p>	Non-compliant	<p>Ensure that personnel responsible for planning and / or managing night works undertake proactive planning for all after hours works. The planning should identify the optimal lighting setup for those activities and that the implementation of the lighting plans be checked prior to undertaking those activities by CROs or other appropriately trained personnel.</p>
		<p>b) establish and maintain vegetated bunds, vegetative screening and/or screen fencing along the boundary of the site including adjoining public roads where appropriate;</p>		<p>The assessment included field lux measurements and qualitative assessment. The lighting review found that operations at MTW meet the approval requirements. The review found that “no improvements are currently required to address lighting impacts from any of the assessment locations assessed as part of this lighting review. Nonetheless, it is recommended that temporary lighting plant be inspected to ensure that all lighting is directed below the horizontal, where safe to do so.”</p>	<p>During the site inspection vegetated visual screening was observed from the major access roads to the site.</p>	<p>Visual screening has been maintained.</p>	Complies	
		<p>c) ensure that all external lighting associated with the development complies with Australian Standard AS4282 (/NT) 1997 - Control of Obtrusive Effects of Outdoor Lighting, or its latest version; and</p>	<p>Mt Thorley Warkworth Lighting Review EMM 6 May 2020 MTW Environmental Monitoring Report, - Night Shift 13 August 2020 MTW Environmental Monitoring Report, - Night Shift 7 August 2021 Environmental Management at Yancoal MTW – New Starters Presentation 2022, 8 June 2023</p>	<p>o MTW’s operational procedures include consideration of lighting impacts from mobile lighting plant to minimise lighting impact to neighbours when setting up the lighting plant. In addition to consideration when setting up lighting plant, MTW utilises inspections from Community Response Officers around the boundary of operations at or just after dusk to attempt to identify any lighting plant that has potential to be intrusive, and feed directly back to operations to request and review lighting plant changes when considered appropriate.</p> <p>o For community lighting complaints, MTW’s complaint response process utilises MTW’s Community Response Officers to respond by inspecting the relevant area, discussing with community members, and feeding back directly to operations to request and review lighting plant changes when considered appropriate.</p>		<p>Environmental induction covers lighting. The Lighting review undertaken in 2020 confirms the offsite lighting impacts was meeting the requirements of this condition. However, 90 lighting complaints were received during the audit period. A review of the complaints indicates that the community impacts are from relocatable lighting and mobile plant, but that fixed lighting is not generating complaints. As part of the internal complaint investigations, CROs assess mobile lighting and arrange changes in light locations or direction and that the actions, in general resolve the issues. It is apparent that there is insufficient planning for the location and use of mobile lighting and therefore all reasonable and feasible mitigation measures have not been used.</p>	Non-compliant	<p>Ensure that personnel responsible for planning and / or managing night works undertake proactive planning for all after hours works. The planning should identify the optimal lighting setup for those activities and that the implementation of the lighting plans be checked prior to undertaking those activities by CROs or other appropriately trained personnel.</p>

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Cond	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
S3 C30	Visual Operating Conditions	d) monitor and report on the effectiveness of these measures.	Mt Thorley Warkworth Lighting Review EMM 6 May 2020 Mt Thorley Warkworth Lighting Review EMM 6 May 2020 MTW Environmental Monitoring Report, - Night Shift 13 August 2020 MTW Environmental Monitoring Report, - Night Shift 7 August 2021			The effectiveness of lighting controls is monitored through routine night shift inspection undertaken by the Community Relations Officer and is reported in each Annual Review (Section 6.6 – amenity and lighting)	Complies	
		e) Initial works to establish the vegetative bunds and/or screening referred to in condition 30(b) must be undertaken within 6 months of the date of commencement of development under this consent (unless otherwise agreed by the Planning Secretary), in accordance with a tree screening plan that has been prepared in consultation with Council and to the satisfaction of the Planning Secretary. The use of screen fencing must be limited to areas where vegetative screening is not feasible, or as an interim measure prior to establishment of vegetation.	Independent Environmental Audit Report for Yancoal Mount Thorley Warkworth, Hansen Bailey, July 2020			Assessed as Not Triggered by the previous audit as it was required prior to the audit period. Vegetation bunds/screening in condition 30(b) are illustrated on page 2 of the Rehab and Visual Screening Presentation provided by MTW during the IEA. The initial works began in 2016 with a shade cloth fitted to security fences from Dragline Crossing to Wallaby Scrub Road intersection. A Stage 1 bund was also constructed along a section of Putty Road. The 2017 audit sighted consultation with Singleton Council. No evidence that the Tree Screening Plan was prepared to the satisfaction of the Secretary.	Not Triggered	
S3 C31	Additional Visual Impact Mitigation	Upon receiving a written request from the owner of any residence on privately-owned land who has, or would have, significant direct views of the mining operations from this residence and/or its associated facilities (such as pool or barbeque area) during the development. the Applicant must implement additional visual mitigation measures (such as landscaping or vegetation screens) on the land in consultation with the landowner. These measures must be reasonable and feasible, and directed towards reducing the visibility of mining operations from the residence and/or its associated facilities. If within 3 months of receiving this request from the owner, the Applicant and the owner cannot agree on the measures to be implemented, or there is a dispute about the implementation of these measures, then either party may refer the matter to the Planning Secretary for resolution.		Environmental and Community Manager – no requests for addition visual impact mitigation has been received during the audit period.		No requests for addition visual impact mitigation have been received during the audit period.	Not Triggered	

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Cond	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
S3 C32	Bushfire Management	The Applicant must: a) ensure that the development is suitably equipped to respond to any fires on site; and	Mount Thorley, Warkworth Bushfire Management Plan, Prepared by Emergency Services Officer, dated 17 September 2019			The Bushfire Management Plan notes the following equipment is available on site which can be used for combating bushfires: <ul style="list-style-type: none"> ISUZU FTO 800 2& 4 wheel drive firefighting appliance with a water capacity of 200 Litres and 120 litres of firefighting foam Water carts with waster capacity up to 2000 litres and 120 litres of firefighting foam D11 Dozers and graders to be used for the preparation of fire breaks Portable fire extinguishers, fire depots, and fire suppression throughout the mine infrastructure 	Complies	
S3 C32	Bushfire Management	b) assist the Rural Fire Service and emergency services as much as practicable if there is a fire in the vicinity of the site.	Have there been any bushfires on site during this audit period?	Environment and Community Manager – No bushfires were experienced during the audit period.		No bushfires were experienced during the audit period.	Not Triggered	
S3 C33	Waste	The Applicant must: a) implement all reasonable and feasible measures to minimise the waste (including coal reject) generated by the development;	Waste Management Plan Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023	Environment and Community Manager – Production processes and CHPP aim to maximise coal recovery, and record strong yield performance, thereby minimizing coal reject. For general wastes – MTW has prepared an Internal Waste Management Plan and the Induction and training programs cover recycling and waste management.	Facilities for the collection and segregation of wastes are provided at all maintenance and administrative areas.	Facilities are provided across the site for the collections and segregation of wastes.	Complies	
		b) ensure that the waste generated by the development is appropriately stored, handled and disposed of; and	Waste Management Records		Facilities for the collection and segregation of wastes are provided at all maintenance and administrative areas.	Wastes are collected, segregated and stored appropriately on-site. Wastes are collected for off-site recycling or disposal by a waste contractor. Details of waste collection and disposal were sighted by the Auditor.	Complies	
		c) monitor and report on effectiveness of the waste minimisation and management measures in the Annual Review.	Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023	Environment and Community Manager – Waste reporting is covered in the Annual Review.		Routine reporting of waste management activities is included in the annual reviews.	Complies	

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Cond	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations	
S3 C34	Rehabilitation Objectives	The Applicant must rehabilitate the site to the satisfaction of the Resources Regulator in accordance with the provisions under the Mining Act 1992 and must be generally consistent with the proposed rehabilitation strategy described in the EIS (and depicted conceptually in the figure in Appendix 5), and comply with the objectives in Table 9.	Ecological Monitoring reports for Rehab areas for 2021 (Emergent Ecology/Dendra Systems) and 2022 (Emergent Ecology/Mosaic Ecology).	Environment and Community Manager - Rehabilitation Management Plan on website, which includes Forward Program and Rehabilitation Objectives. Interviews with rehabilitation staff were undertaken by the ecologists during site visit on 26 April 2023.	Parts of rehabilitation areas were inspected by the Ecologists on 26 April 2023.	Ecological reports reviewed by the ecology specialists detailed the findings of monitoring in rehab areas. While some criteria are meeting relevant targets, further works, particularly in areas in early phases of treatment, are required to meet long term targets to establish self-sustaining ecosystems. Weed control is a significant management issue for the rehabilitation areas and the wider Hunter Valley, particularly following favourable weather conditions during the La Niña phase in 2020 – 2022. While current weed management controls are generally acceptable and in accordance with key guidelines, achieving long term performance and long-term completion criteria may require more intensive control actions.	Complies	Recommendations to achieve targets, as detailed in the Ecological monitoring reports, include: <ul style="list-style-type: none"> • More intensive weed control of High Threat Weeds; • Control of overly dominant natives (e.g Corymbia maculate, Acacia species) via thinning or changes to seed mix; and • Improved distribution of ground habitat features (such as logs); 	
	Table 9	Feature	Objective						
S3 C34	Table 9	Mine site (as a whole)	<ul style="list-style-type: none"> • Safe, stable and non-polluting • Materials (including topsoils, substrates and seeds of the disturbed areas) are recovered, appropriately managed and used effectively as resources in the rehabilitation of the site • Final landforms to: o sustain the intended land use for the post-mining domains; o be designed to minimise the visual impacts of the development; o be in keeping with the natural terrain features of the area; o be integrated with the rehabilitated landforms of surrounding mines; o backfill the gap between the two main emplacements in accordance with the dozer (and dragline) option shown on the applicable figure in Appendix 6; o incorporate micro-relief; and o incorporate drainage lines consistent with topography and natural drainage where reasonable and feasible 						
		Water Quality	<ul style="list-style-type: none"> • Water retained on site is fit for the intended land use(s) for the post-mining domains • Water discharged from site is consistent with the baseline ecological, hydrological and geomorphic conditions of the creeks prior to mining disturbance • Water management is consistent with the applicable regional catchment strategy 						
		Biodiversity	<ul style="list-style-type: none"> • Restore ecosystem function, including maintaining or establishing self-sustaining ecosystems comprising local plant species • Vegetation to be established, with the restoration of at least 1,617 hectares of Central Hunter Grey Box – Ironbark Woodland EEC • Size, location and species of native tree lots and corridors are established to sustain biodiversity habitats • Species are selected that re-establishes and complements regional and local biodiversity 						
		Surface Infrastructure	<ul style="list-style-type: none"> • To be decommissioned and removed, unless the Resources Regulator agrees otherwise 						
		Agriculture	<ul style="list-style-type: none"> • Land capability classification for the relevant nominated agricultural pursuit for each domain is established and self-sustaining within 5 years of land use establishment (first planting vegetation) 						
		Community	<ul style="list-style-type: none"> • Ensure public safety • Minimise the adverse socio-economic effects associated with mine closure 						
S3 C35	Progressive Rehabilitation	The Applicant must 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 must be employed when areas prone to dust generation cannot yet be permanently rehabilitated.	Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023			Annual Review reports detail progress of mine rehabilitation progress against MOP plans. The net rehabilitation progress (i.e. rehabilitation minus rehabilitation disturbance) for the 2015 – 2021 period was 20.4 ha higher than targets. A total of 47.9ha of new rehabilitation was completed during 2022 against a Mining Operations Plan 2022 target of 35ha. 2022 annual report notes that rehabilitation and disturbance forecasts submitted to Resources Regulator (submitted in August 2022) are based on financial year periods and therefore don't align with the calendar year Annual Review reporting period and the misalignment is intended to be corrected in the Forward Program to be submitted in May 2023.	Complies		

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Cond	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations	
S3 C36	Rehabilitation Management Plan	The Applicant must prepare a Rehabilitation Management Plan for the development to the satisfaction of the DRE and carry out the development in accordance with this plan. The plan must:	Rehabilitation Management Plan, Mount Thorley Warkworth, Version 1 dated 28 July 2022			The Rehabilitation Management Plan has been prepared.	Complies		
		a) Be submitted to the DRE for approval prior to carrying out the development under this consent.	Rehabilitation Management Plan, Mount Thorley Warkworth, Version 1 dated 28 July 2022			The latest version of the plan was submitted via email and via spatial data portal. Review by Resources Regulator remains in progress. Correspondence with RR was sighted by the Auditor	Complies		
		b) be prepared in consultation with the Department, NOW, OEH, Council and the CCC;	Rehabilitation Management Plan, Revision 1, dated 28 July 2022.			Section 4.2 of the plan details the consultation undertaken on past and the current version of the plan.	Complies		
		c) be prepared in accordance with any relevant DRE guideline, including any NSW government policy regarding voids;	Rehabilitation Management Plan, Revision 1, dated 28 July 2022.	Environment and Community Manager – the latest version of the RMP was prepared in accordance with the Resource Regulator’s Form and Way Document.			The latest version of the RMP was prepared in accordance with the Resource Regulator’s Form and Way Document.	Complies	
		d) include detailed performance and completion criteria for evaluating the performance of the rehabilitation of the site, and triggering remedial action (if necessary);	Rehabilitation Management Plan, Revision 1, dated 28 July 2022.				Section 4 of the RMP describes the performance and completion criteria.	Complies	
		e) describe the measures that would be implemented to ensure compliance with the relevant conditions of this consent, and Resources Regulator all aspects of rehabilitation including timeframes for achieving specified rehabilitation objectives;	Rehabilitation Management Plan, Revision 1, dated 28 July 2022.				Rehabilitation implementation is discussed in Section 6 of the RMP. Section 7 describes the rehabilitation quality control processes; Section 8 describes the monitoring program and Section 10 describes the intervention and adaptative management processes.	Complies	
		f) includes a mine closure strategy, that details measures to minimise the long term impacts associated with mine closure, including final landform. final land use and socioeconomic issues;	Rehabilitation Management Plan, Revision 1, dated 28 July 2022.				Section 5 of the plan describes the final landforms and rehabilitation plan	Complies	
		g) include interim rehabilitation where necessary to minimise the area exposed for dust generation;	Rehabilitation Management Plan, Revision 1, dated 28 July 2022.				The RMP does not address the interim rehabilitation of the site to minimise dust generation.	Non-compliant	Review and revise the plan to include the interim rehabilitation of the site to minimise dust generation.
		h) include a program to monitor, independently audit and report on the effectiveness of the measures, and progress against the detailed performance and completion criteria; and	Rehabilitation Management Plan, Revision 1, dated 28 July 2022.				Rehabilitation implementation is discussed in Section 6 of the RMP. Section 7 describes the rehabilitation quality control processes; Section 8 describes the monitoring program and Section 10 describes the intervention and adaptative management processes.	Complies	
		i) build to the maximum extent practicable on the other management plans required under this consent.	Rehabilitation Management Plan, Revision 1, dated 28 July 2022.					Noted	

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Cond	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
S4 C1	Notifications of Landowners / tenants	<p>Within 1 month of the date of this consent, the Applicant must:</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 Applicant to acquire their land in accordance with the procedures in conditions 5-6 below at any stage during the development; any residence on the land listed in Table 3 of schedule 3 that they have the right to request the Applicant to ask for additional noise mitigation measures to be installed at their residence at any stage during the development; and any privately-owned land within 2 kilometres of the approved open cut mining pits that they are entitled to ask for an inspection to establish the baseline condition of any buildings or structures on their land, or to have a previous property inspection report updated; 	<p>Independent Environmental Audit Report for Yancoal Mount Thorley Warkworth, Hansen Bailey, July 2020 MTW 2017 Independent Environmental Audit, 2017 Independent Audit Report, Jacobs, 8 August 2018</p>			<p>Assessed as compliant by the 2020 and 2017 Audits.</p>	Complies	
		<p>b) notify the tenants of any mine-owned land of their rights under this consent (see condition 18 of schedule 3); and</p>	<p>MTW 2017 Independent Environmental Audit, Jacobs 8 August 2018 Letter from Coal and Allied (M Rodgers) to Private Landowner titled Letter from Coal and Allied (M Rodgers) to Private Landowner titled "Landowner Notification – Mount Thorley Continuation Project Development Consent SSD-6465 Property: Lot DP in DP 7" dated 17 December 2015</p>			<p>Assessed as compliant by the 2017 Audit. Sample letters were reviewed by the Auditor that confirmed compliance with the condition</p>	Complies	
		<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 EIS identify that dust emissions generated by the development are likely to be greater than the relevant air quality criteria in schedule 3 at any time during the life of the development.</p>	<p>MTW 2017 Independent Environmental Audit, Jacobs 8 August 2018</p>			<p>Assessed as compliant by the 2017 Audit.</p>	Complies	

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Cond	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
S4 C2	Notifications of Landowners / tenants	<p>Prior to entering into any tenancy agreement for any land owned by the Applicant that is predicted to experience exceedances of the recommended dust and/or noise criteria, or for any of the land listed in Table 1 that is subsequently purchased by the Applicant, the Applicant must:</p> <p>a) advise the prospective tenants of the potential health and amenity impacts associated with living on the land, and give them a copy of the NSW Health fact sheet entitled "Mine Dust and You" (as may be updated from time to time); and</p>	<p>Residential tenancy agreement – 1 Wambo Road Bulga (ID 52961)</p> <p>Residential tenancy agreement – 1 Wambo Road Bulga (ID 46983)</p>			<p>Assessed as compliant by the 2017 Audit. A sample of tenancy agreements were reviewed. Schedule 3 of each tenancy agreement includes a "Mine dust and you" health fact sheet</p>	Complies	
		<p>b) advise the prospective tenants of the rights they would have under this consent, to the satisfaction of the Planning Secretary.</p>				<p>Assessed as compliant by the 2017 Audit. Schedule 2 of the tenancy agreements include a tenant information statement that provides details of tenants rights and obligations.</p>	Complies	
S4 C3	Notifications of Landowners / tenants	<p>As soon as practicable after obtaining monitoring results showing:</p> <p>a) an exceedance of any relevant criteria in schedule 3, the Applicant must notify affected landowners in writing of the exceedance, and provide regular monitoring results to each affected landowner until the development is again complying with the relevant criteria; and</p>	<p>Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021</p> <p>Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022</p> <p>Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023</p>			<p>There were no noise exceedances recorded during the routine monthly monitoring within the audit period.</p>	Not Triggered	
		<p>b) an exceedance of the relevant air quality criteria in schedule 3, the Applicant must send a copy of the NSW Health fact sheet entitled "Mine Dust and You" (as may be updated from time to time) to the affected landowners and/or existing tenants of the land (including the tenants of any mine-owned land).</p>	<p>Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021</p> <p>Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022</p> <p>Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023</p>			<p>There were no dust exceedances recorded during the routine monthly monitoring within the audit period.</p>	Not Triggered	

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Cond	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
S4 C4	Independent Reviews	If an owner of privately-owned land considers the development to be exceeding the criteria in schedule 3 at his/her land, then he/she may ask the Planning Secretary in writing for an independent review of the impacts of the development on his/her land.	Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023	Environment and Community Manager – No independent Reviews were requested during the audit period.		No independent Reviews were requested during the audit period.	Not Triggered	
		If the Planning Secretary is satisfied that an independent review is warranted, then the Applicant must: a) commission a suitably qualified, experienced and independent expert, whose appointment has been approved by the Planning Secretary, to: • consult with the landowner to determine his/her concerns; • conduct monitoring to determine whether the development is complying with the relevant impact assessment criteria in schedule 3; and • if the development is not complying with these criteria then: o determine if the more than one mine is responsible for the exceedance, and if so the relative share of each mine regarding the impact on the land; o identify the measures that could be implemented to ensure compliance with the relevant criteria; and	Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023	Environment and Community Manager – No independent Reviews were requested during the audit period.		No independent Reviews were requested during the audit period.	Not Triggered	
		b) give the Planning Secretary and landowner a copy of the independent review within 2 months of the Planning Secretary's decision, unless the Planning Secretary agrees otherwise.	Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023	Environment and Community Manager – No independent Reviews were requested during the audit period.		No independent Reviews were requested during the audit period.	Not Triggered	

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Cond	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations	
S4 C5	LAND ACQUISITION	<p>Within 3 months of receiving a written request from a landowner with acquisition rights, the Applicant must make a binding written offer to the landowner based on:</p> <p>a) the current market value of the landowner's interest in the land at the date of this written request, as if the land was unaffected by the development, having regard to the:</p> <ul style="list-style-type: none"> 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 noise mitigation measures in condition 3 of schedule 3; 	<p>Letter from Spark Helmore Lawyers (A McKelvey) to Yancoal (N Cook) titled "Exercise of acquisition rights under Mount Thorley Continuation Project Development Consent (SSD-6465) Property: Loders Hill, 887 Putty Road, Mount Thorley (Lot 40 in DP 1147419)</p> <p>Letter from TEW Advisory Services (R. Tew/R.Stokes) titled "Lot 5 DP10022 (Receptor K) Asset Situated proximate to Mt Thorley Operations Pty Ltd 2015 Continuation Project Development Consent (SSD 6465) "Development Consent)" dated 21 December 2022</p> <p>Letter from Costello Group Pty Ltd to Tew Property Consultants titled "Exercise of acquisition rights by Recluse Pty Ltd under Mount Thorley Continuation Project Development Consent (SSD 6465) Property: Lot 5 in DP 10022 Putty Road, Bulga New South Wales 2330, Dated 7th June 2023</p> <p>Letter from Costello Group Pty Ltd to Mr T Hedley) titled "Exercise of acquisition rights under Mount Thorley Continuation Project Development Consent (SSD 6465) Property: Loders Hill, 887 Puttt Road, Mount Thorley, NSW 2330 [Lot 40 in DP 1147419]</p>	<p>Environment and Community Manager - Written acquisition requests have been received for two properties:</p> <p>Property K – Recluse - Lot 5 DP 10022 Putty Road Bulga</p> <ul style="list-style-type: none"> AUR Request letter dated 21 December 2022. Offer tabled 7 March 2023 (Costello Group on behalf of MTO and Robert Tew valuer on behalf of Recluse Pty Ltd) Offer is made with respect to (a) to (c) Negotiations remain open and are ongoing between MTO and Recluse. <p>Property 149 – Hedley – 887 Putty Road Mount Thorley</p> <ul style="list-style-type: none"> AUR Request letter dated 12 October 2022 Offer tabled 27 February 2023. During the 3 months there was dialogue between MTO (via Costello Group) and Hedley together with dialogue between MTO (via Minter Ellison lawyers) to Sparke Helmore lawyers (on behalf of Hedley) In the ongoing discussions with Hedley since there has been no issues raised in regard to the timing of any offer. Negotiations remain open and are ongoing between MTO and Hedley. <p>Neither property is in dispute</p>			<p>Yancoal have been approached by the owners of two properties identified in Table 1. These are:</p> <ul style="list-style-type: none"> Property 149(Noise) Property K (Air) <p>Notices were issued in late 2022. The acquisition process will take some time, discussions with both property owners are ongoing. As such these properties are yet to be acquired by Yancoal. Neither properties are in dispute.</p>	Complies	
		<p>b) the reasonable costs associated with:</p> <ul style="list-style-type: none"> relocating within the Muswellbrook, Singleton or Cessnock local government area, or to any other local government area determined by the Planning Secretary; and obtaining legal advice and expert advice for determining the acquisition price of the land, and the terms upon which it is to be acquired; and 					The current round of acquisitions is in progress.	Noted	
		<p>c) reasonable compensation for any disturbance caused by the land acquisition process.</p>					The current round of acquisitions is in progress.	Noted	
		<p>However, if at the end of this period, the Applicant and landowner cannot agree on the acquisition price of the land and/or the terms upon which the land is to be acquired, then either party may refer the matter to the Planning Secretary for resolution.</p>					The current round of acquisitions is in progress.	Noted	
S4 C6	Land Acquisition	<p>The Applicant must pay all reasonable costs associated with the land acquisition process described in condition 5 above, including the costs associated with obtaining Council approval for any plan of subdivision (where permissible), and registration of this plan at the Office of the Registrar-General.</p>					The current round of acquisitions is in progress.	Noted	

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Cond	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
S5 C1	Environmental Management Strategy	The Applicant must prepare an Environmental Management Strategy for the development to the satisfaction of the Planning Secretary and carry out the development in accordance with this strategy. The strategy must:	Environmental Management Strategy, Mt Thorley Warkworth, Revision 2.1 dated 28/7/2022 Letter from DPE (M S Prutt) to Warkworth Mining (G. Mulhearn) titled "Mount Thorley Continuation Project (SSD 6465) Warkworth Continuation Project (SSD 6464) Environmental Management Strategy" dated 20 July 2021			The strategy provides a suitable strategic framework for the environmental management of the development and was approved by the Planning Secretary on the 20 July 2021.	Complies	
		a) be submitted to the Planning Secretary for approval prior to carrying out any development under this consent;	Environmental Management Strategy, Mt Thorley Warkworth, Revision 2.1 dated 28/7/2022			The strategy provides a suitable strategic framework for the environmental management of the development	Complies	
		b) provide the strategic framework for environmental management of the development;	Environmental Management Strategy, Mt Thorley Warkworth, Revision 2.1 dated 28/7/2022			Section 5 and Table 1 summarize the Statutory Approvals for the Development	Complies	
		c) identify the statutory approvals that apply to the development;	Environmental Management Strategy, Mt Thorley Warkworth, Revision 2.1 dated 28/7/2022			Sections 6.3- 6.6 of the Plan includes Information relating to:	Complies	
		d) describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the development;	Environmental Management Strategy, Mt Thorley Warkworth, Revision 2.1 dated 28/7/2022			<ul style="list-style-type: none"> - Information dissemination - The role of the Community Consultative Committee - Provision of information via the project website - Community Complaints Management - Dispute Resolution - Emergencies 	Complies	
		e) describe the procedures that would be implemented to:	Environmental Management Strategy, Mt Thorley Warkworth, Revision 2.1 dated 28/7/2022			Appendix C of the Strategy includes the Plans, strategies and programs that are required by both SSD 6464 and SSD 6465 with a reference to the MTW website and Includes:	Complies	
		<ul style="list-style-type: none"> • keep the local community and relevant agencies informed about the operation and environmental performance of the mine development; • receive, handle, respond to, and record complaints; • resolve any disputes that may arise; • respond to any non-compliance; • respond to emergencies; and 			<ul style="list-style-type: none"> - Noise Management Plan - Blast Management Plan - Water Management Plan - Aboriginal Heritage Management Plan - Wollombi Brook Aboriginal Cultural Heritage Area Conservation Area Plan of Management - Historic Heritage Management Plan - Rehabilitation Management Plan - Biodiversity Management Plan - Pollution Incident Response Management Plan 	Complies		
		f) include:	Environmental Management Strategy, Mt Thorley Warkworth, Revision 2.1 dated 28/7/2022			Appendix C of the Strategy includes the approved Plans, strategies and programs that are required by both SSD 6464 and SSD 6465 with a reference to the MTW website. Including:	Complies	
		<ul style="list-style-type: none"> • copies of any strategies, plans and programs approved under the conditions of this consent; and • a clear plan depicting all the monitoring required to be carried out under the conditions of this consent. 				<ul style="list-style-type: none"> - Noise Management Plan - Blast Management Plan - Water Management Plan - Aboriginal Heritage Management Plan - Wollombi Brook Aboriginal Cultural Heritage Area Conservation Area Plan of Management - Historic Heritage Management Plan - Rehabilitation Management Plan - Biodiversity Management Plan - Pollution Incident Response Management Plan 	Complies	

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Cond	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
S5 C2	Adaptive Management	<p>The Applicant must assess and manage development-related risks to ensure that there are no exceedances of the criteria and/or performance measures in schedule 3. Any exceedance of these criteria and/or performance measures constitutes a breach of this consent and may be subject to penalty or offence provisions under the EP&A Act or EP&A Regulation.</p> <p>Where any exceedance of these criteria and/or performance measures has occurred, the Applicant must, at the earliest opportunity:</p> <p>a) take all reasonable and feasible steps to ensure that the exceedance ceases and does not recur;</p>	<p>Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021</p> <p>Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022</p> <p>Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023</p>			<ul style="list-style-type: none"> Examples of Adaptive Management Actions taken during the audit period: noise exceedance – new handheld monitor purchased and tool developed to enable identification of low frequency noise for supplementary noise readings. -blast exceedance – review of property ownership information to identify residences on privately owned land, and then update of Blast Management Plan to reflect this. -water management – refer DPE correspondence folder regarding Action Plan for MTO sediment basin at various dates in the audit period, which is intended to divert rehabilitation runoff through a sediment basin and then offsite. 	Complies	
		<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 course of action; and</p>	<p>Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021</p> <p>Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022</p> <p>Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023</p>				Complies	
		<p>c) implement remediation measures as directed by the Planning Secretary.</p>	<p>Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021</p> <p>Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022</p> <p>Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023</p>	<p>Environment and Community Manager - No directions issued by DPE for remedial actions during the audit period.</p>		<p>No directions issued by DPE for remedial actions during the audit period.</p>	Not Triggered	

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Cond	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
S5 C3	Management Plan Requirements	The Applicant must ensure that the management plans required under this consent are prepared in accordance with any relevant guidelines, and include:	Environmental Management Plans including: - Environmental Management Strategy - Air Quality Management Plan - Water Management Plan - Blast Management Plan - Social Impact Management Plan - Pollution Incident Response Management Plan - Rehabilitation Management Plan - Biodiversity Management Plans (various) - Aboriginal Heritage Management plan - Historic Heritage Management Plan			Baseline data is provided in Section 4 of the various management plans (Existing Character) where applicable	Complies	
		a) detailed baseline data;						
		b) a description of: <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; 				The management plans include the relevant statutory/ approval requirements as well as criteria to be achieved	Complies	
		c) a description of the measures that would be implemented to comply with the relevant statutory requirements, limits, or performance measures/criteria;				The management plans include details of management and mitigation options.	Complies	
		d) a program to monitor and report on the: <ul style="list-style-type: none"> impacts and environmental performance of the development; effectiveness of any management measures (see c above); 				The management plans include monitoring programs to evaluate the effectiveness of any management measures.	Complies	
		e) a contingency plan to manage any unpredicted impacts and their consequences;				The management plans include monitoring programs to evaluate the effectiveness of any management measures and contingency planning.	Complies	
		f) a program to investigate and implement ways to improve the environmental performance of the development over time;		- Environmental Management Strategy		Adaptive management process is provided in the EMS.	Complies	
		g) protocol for managing and reporting any: <ul style="list-style-type: none"> incidents; complaints; non-compliances with statutory requirements; and exceedances of the impact assessment criteria and/or performance criteria; and 		- Environmental Management Strategy		Various sections of the Environmental Management Strategy describe the relevant processes as follows: - Incidents (Section 7.5) - Complaints (Section 6.5) - Non compliances (Section 7.4) - Exceedances (Sections 7.3 /7.4)	Complies	
h) a protocol for periodic review of the plan.	- Environmental Management Strategy		Section 8 of the Environmental Management Strategy describes the process for Review of the Environmental Management Strategy as well as any other subordinate strategies, plans and programs described by the development consents.	Complies				

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Cond	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
S5 C4	Annual Review	By the end of March each year, the Applicant must review the environmental performance of the development for the previous calendar year to the satisfaction of the Planning Secretary. This review must:	<p>Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021</p> <p>Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022</p> <p>Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023</p> <p>2019</p> <p>Letter from Yancoal (G.Mulhearn) to DPE (Ann Hagerthy) titled " Mt Thorley Warkworth SSD 6464 and SSD Annual Review Report" dated 31 March 2020</p> <p>Letter from DPE (H.Watters) to Yancoal Australasia (G. Mulhearn) titled " Mt Thorley Warkworth Complex – SSD 6464 (Continuation Project) and SSD 6465 (Mount Thorley Continuation Project) Annual Review 2019 dated 17 June 2020</p> <p>2020</p> <p>DPE Post Approval form reference Schedule 5 Condition 4 dated 29 April 2021</p> <p>Letter from DPE (H.Watters) to Yancoal Australasia (G. Mulhearn) titled " Mt Thorley Warkworth SSD 6464 and SSD Annual Review 2020 dated 2 November 2021</p> <p>2021</p> <p>Email from DPE (Major Projects) to Yancoal (G. Mulhearn), 6 April 2022</p> <p>Letter from DPE (H. Watters) to Yancoal (G. MULhearn) titled " Warkworth Continuation (SSD -6464) and Mt Thorley Continuation (SSD-6465) 2021 Annual Review – Request for Additional Information" dated 20, June 2022</p> <p>Letter from DPE (H. Watters) titled "Warkworth Continuation – 2021 Annual Review (SSD – 6464)" dated 10 October 2022</p> <p>2022</p> <p>Letter from Yancoal (G.Mulhearn) to DPE (H.Watters) titled "Mt Thorley Warkworth Complex (SSD-6464 and SSD – 6465) Annual Review Report</p> <p>Letter from DPE (H. Watters) to Yancoal (G. MULhearn) titled "Warkworth Continuation – Extension Request – 2022 Annual Review (SSD 6464) Extension of Time to Type of Request" dated 28 March 2023</p>			<p>2019 Annual Review</p> <ul style="list-style-type: none"> lodged with DPE on the 31 March 2020 endorsed by DPE on the 17 June 2020 <p>2020 Annual Review</p> <ul style="list-style-type: none"> lodged with DPE on the 29 April 2021 endorsed by DPE on the 2nd of November 2021 An extension of time was granted by DPE to lodge the Annual Review by 31st of April 2021 <p>2021 Annual Review</p> <ul style="list-style-type: none"> lodged with DPE on the 31st of March 2022 DPE requested additional information on 20 June 2022 endorsed by DPE on the 10 October 2022 <p>2022 Annual Review</p> <ul style="list-style-type: none"> Extension of time requested on 27 March 2023 to lodge AR on 1 May 2023 Approval for extension of time to 1 May 2023 granted by DPE Lodged with DPE on 1 May 2023 DPE advised on 2 May 2023 of their commencement of their detailed assessment Annual review is yet to be endorsed by DPE 	Complies	

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Cond	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
S5 C4	Annual Review	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;	Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023			Section 4 of each Annual Review summarises the following activities undertaken during the audit period: <ul style="list-style-type: none"> • Mining activities • Mineral Processing • Production statistics • Summary of changes (development and equipment upgrades) Section 7 and Appendix 8 of each Annual Review provides a comprehensive summary of rehabilitation activities undertaken	Complies	
		b) include a comprehensive review of the monitoring results and complaints records of the development over the past year, which includes a comparison of these results against the: <ul style="list-style-type: none"> • relevant statutory requirements, limits or performance measures/criteria; • monitoring results of previous years; and • relevant predictions in the EIS; 	Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023			Section 6 of each Annual Review provides a comprehensive review of the monitoring results, including meteorological data, noise, blasting, air quality, water and waste. Section 8 of each Annual Review provides a summary of complaints, communications and community engagement activities. A comparison against the predictions in the EA are made for noise and dust (refer to Tables 6.5 (noise) and 6.7 (dust)). Surface water monitoring results are assessed against trigger limits	Complies	
		c) identify any non-compliance over the last year, and describe what actions were (or are being) taken to ensure compliance;	Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023			Section 10 of each Annual Review provides details of incidents and noncompliance as well as activities to be completed in the next year	Complies	
		d) identify any trends in the monitoring data over the life of the development;	Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023			Long term monitoring trends are graphically presented in figures throughout the document.	Complies	
		e) identify any discrepancies between the predicted and actual impacts of the development, and analyse the potential cause of any significant discrepancies; and	Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023			Section 6 of each Annual Review provides a comprehensive review of the monitoring results, including meteorological data, noise, blasting, air quality, water and waste. Section 8 of each Annual Review provides a summary of complaints, communications and community engagement activities. A comparison against the predictions in the EA are made for noise and dust (refer to Tables 6.5 (noise) and 6.7 (dust)). Surface water monitoring results are assessed against trigger limits	Complies	
		f) describe what measures will be implemented over the next year to improve the environmental performance of the development.	Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2021 Annual Review, 1 May 2023			Section 11 provides details of actions to be completed over the next reporting period to improve the environmental performance	Complies	

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Cond	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
S5 C5	Revision of Strategies, Plans and Programs	<p>Within 3 months of:</p> <p>a) the submission of an:</p> <ul style="list-style-type: none"> • annual review under condition 4 above; • incident report under condition 7 below; • audit report under condition 9 below; or 	Environmental Management Plans Review Register 2020			Detailed registers of document reviews are maintained by Yancoal to plan and track document reviews.	Complies	
		<p>b) any modification to the conditions of this consent (unless the conditions require otherwise), or</p>	Environmental Management Plans Review Register 2021					
		<p>c) the introduction of any NSW government policy regarding voids, the Applicant must review, and if necessary revise, the strategies, plans, and programs required under this consent to the satisfaction of the Planning Secretary.</p>	Environmental Management Plans Review Register 2022					
		<p>d) Where this review leads to revisions in any such document, then within 4 weeks of the review, unless the Planning Secretary agrees otherwise, the revised document must be submitted to the Planning Secretary for approval.</p> <p>Note: This is to ensure the strategies, plans and programs are updated on a regular basis, and incorporate any recommended measures to improve the environmental performance of the development.</p>	<p>Letter from Yancoal (G.Mulhearn) to DPE (M Sprott) titled "Mount Thorley Warkworth updated Water Management Plan" dated 20 December 2019</p> <p>Letter from DPE (M Sprott) to Yancoal (G Mulhearn) titled "Mount Thorley Water Management Plan, dated 13 May 2020</p> <p>Letter from DPE (J Fittell) to Yancoal (G.Mulhearn) titled "Mt Thorley Continuation Project (SSD -6465) and Warkworth Continuation Project SSD (6464) dated 8 August 2022</p>			Examples were provided which confirmed DPE had reviewed and approved management plans during the audit period	Complies	
S5 C6	Community Consultative Committee	The Applicant must operate a Community Consultative Committee (CCC) for the development to the satisfaction of the Planning Secretary. This CCC must be operated in accordance with the Guidelines for Establishing and Operating Community Consultative Committees for Mining Projects (Department of Planning, 2007, or its latest version). It may also be combined with any CCC for the Warkworth mine.	<p>MTW Website</p> <p>Community - MOUNT THORLEY WARKWORTH COAL OPERATIONS LIMITED (mtwcoal.com.au)</p>			The current Mount Thorley Warkworth Community consultative committee comprises an independent chair, the MTW General Manager, Environment Manager, Singleton Shire Council , Singleton Shire Healthy Environment Group and members of the local community. A copy of the CCC guidelines are provided on the MTW website along with the minutes of CCC meetings from 2016 - 2023	Complies	

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Cond	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations			
S5 C7	Reporting	The Applicant must immediately notify the Planning Secretary and any other relevant agencies of any incident. Within 7 days of the date of the incident, the Applicant must provide the Planning Secretary and any relevant agencies with a detailed report on the incident, and such further reports as may be requested.	Reportable Incident Correspondence	The following incidents have been notified to the Planning Secretary relating to the Mt Thorley Operations						Complies	
				Incident Date	DPE Notification Date	Other Agencies Notification date	DPE Report date	Incident Type	Note		
				14/5/20	14/5/20	14/5/29	21/5/20	Water discharge	EPA – Official Caution		
				1/1/19 – 31/12/19	29/5/20	29/5/20	16/6/20	Blasting exceedance	Exceedances occurred over a 12-month period		
				4/1/21	4/1/21	4/1/21	29/1/21	Water Discharge	DPE report late. EPA and DPE Show Cause letters EPA Penalty Notice DPE Penalty Notice		
5/7/22	5/7/22	5/7/22	5/7/22	Water Discharge							
S5 C8	Regular Reporting	The Applicant must provide regular reporting on the environmental performance of the development on its website, in accordance with the reporting arrangements in any plans or programs approved under the conditions of this consent.	MTW Website Mount Thorley Warkworth Coal (mtwcoal.com.au)			The MTW website includes monthly environmental monitoring reports as well as real time data for air quality, noise and complaints.	Complies				

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Cond	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations	
S5 C9	Independent Environmental Audit	Within 1 year of the commencement of development under this consent. and every 3 years thereafter, unless the Planning Secretary directs otherwise, the Applicant must commission and pay the full cost of an Independent Environmental Audit of the development. This audit must:	Independent Environmental Audit Report for Yancoal Mount Thorley Warkworth, Hansen Bailey, July 2020 Mt Thorley Warkworth Complex (SSD-6464 and SSD -6465) Independent Audit 2020 – Responses to Audit Recommendations MTW 2017 Independent Environmental Audit, 2017 Independent Audit Report, Jacobs, 8 August 2018 Response to Non – Compliances and Recommendations MTW IEA 2017 (Rev C) 2016 Independent Environmental Audit, Mt Thorley and Warkworth Operations, Peter Horn, 12 May 2016				Independent audits were undertaken in 2016, 2017, 2020 and 2023 (this audit) The 2023 audit has been undertaken within 3 years of the previous (2020 audit)	Complies	
		a) be conducted by a suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Planning Secretary;	Independent Environmental Audit Report for Yancoal Mount Thorley Warkworth, Hansen Bailey, July 2020 Letter from DPE (H. Watters) to Yancoal (G. Mulhearn) titled “Mt Thorley Warkworth Complex (SSD 6464 and SSD 6465) – 2020 Independent Environmental Audit” dated 24 February 2020				The previous audit was undertaken by Hansen Bailey, the audit team, were approved by DPE on the 24 February 2020	Complies	
		b) include consultation with the relevant agencies;	Independent Environmental Audit Report for Yancoal Mount Thorley Warkworth, Hansen Bailey, July 2020				Agency consultation is summarized in Section 3.3 with full records of consultation provided in Appendix A	Complies	
		c) assess the environmental performance of the development and assess whether it is complying with the requirements in this consent and any relevant EPL or Mining Lease (including any assessment, plan or program required under these approvals);	Independent Environmental Audit Report for Yancoal Mount Thorley Warkworth, Hansen Bailey, July 2020				Section 6 of the audit report provides details of non-compliances with the project conditions of consent including the EPL and the mining lease	Complies	
		d) include an assessment - undertaken by an independent expert whose appointment has been endorsed by BCD - of the progress towards implementation of the biodiversity offset strategy in particular the regeneration of the Warkworth Sands Woodland against the detailed performance and completion criteria under the Biodiversity Management Plan (see condition 36 of schedule 3);	Letter from DPE (H.Watters) to Yancoal (G.Mulhearn) titled “Mt Thorley Warkworth Complex (SSD 6464 and 6465)- 2020 Independent Environmental Audit dated 24 February 2020				WSP are the nominated ecologist and were endorsed by DPE. The assessment undertaken to address this condition is included in Appendix F of the 2020 IEA.	Complies	
		e) review the adequacy of strategies, plans or programs required under the abovementioned approvals; and	Independent Environmental Audit Report for Yancoal Mount Thorley Warkworth, Hansen Bailey, July 2020				Section 4 and Appendix E of the 2020 IEA address this requirement	Complies	
		f) recommend appropriate measures or actions to improve the environmental performance of the development, and/or any assessment, plan or program	Independent Environmental Audit Report for Yancoal Mount Thorley Warkworth, Hansen Bailey, July 2020				Section 7 (Table 8) of the 2020 independent environmental audit provides a series of recommendations aimed at improving the environmental performance.	Complies	

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Cond	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
		required under the above-mentioned approvals.						
S5 C10	Independent Environmental Audit	Within 6 weeks of the completion of this audit, unless the Planning Secretary agrees otherwise. the Applicant must submit a copy of the audit report to the Planning Secretary, together with its response to any recommendations contained in the audit report.	Letter from DPE (H. Watters) to Yancoal (G.Mulhearn) titled "Mt Thorley Warkworth Complex (SSD 6464 and SSD 6465) 2020 Independent Environmental Audit" dated 16 June 2020 Letter from DPE (H. Watters) to Yancoal (G. Mulhearn) titled " Mount Thorley and Warkworth Complex (SSD 6464 and SSD – 6465) Independent Environmental Audit dated 10 July 2020			DPE granted an extension of time for the submission of the 2020 audit report to the 17 July 2020..	Complies	
S5 C11	ACCESS TO INFORMATION	From the commencement of development under this consent, the Applicant must: (a) make the following information publicly available on its website: <ul style="list-style-type: none"> the EIS; current statutory approvals for the development; approved strategies, plans or programs required under the conditions of this consent; a comprehensive summary of the compliance monitoring results of the development, reported in accordance with the specifications in any conditions of this consent, or any approved plans and programs; the results of real time noise monitoring, updated daily (unless otherwise agreed by the Planning Secretary); a complaints register, which is to be updated monthly; minutes of CCC meetings; the last five annual reviews of the development (for the last 5 years, if applicable); any independent environmental audit; and the Applicant's response to the recommendations in any audit; any other matter required by the Planning Secretary; and (b) keep this information up to date;	Yancoal, Mt Thorley Website Mount Thorley Warkworth Coal (mtwcoal.com.au)	Environment and Community Manager- Annual Review for 2022 is currently with DPE for approval and MTW policy is to upload the document to the website once it has been approved		<ul style="list-style-type: none"> The website includes the following documents: <ul style="list-style-type: none"> Environmental Impact Assessment Project Modifications Environmental Management Strategy and Plans including: <ul style="list-style-type: none"> Environmental Management Strategy Air Quality Management Noise Management Waste Management Blast Management Pollution Incident Response Management Rehabilitation Biodiversity Indigenous and Cultural Heritage Statutory Approvals including: <ul style="list-style-type: none"> SSD 6465 Mt Thorley Continuation Development Consent EPL 1976 Mount Thorley Operations Pty Ltd EPBC 2009/5081 EPBC 2002/629 Monthly environmental monitoring reports that include annual complaints register Community consultative committee meeting minutes Annual Review reports dated from 2016 to 2021. The 2022 AR was not loaded onto the website, however Yancoal noted that it is policy not to provide the AR on the website until it is approved by DPE (approval pending) Independent Audits and response to audit findings for years 2016 to 2020 	Complies	

Compliance Register EPL 1376

Warkworth Mine

Appendix A3

Environment Protection Licence (EPL 1376) Warkworth Mining Ltd								
Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
A1.1	What the Licence Authorises and Regulates	This licence authorises the carrying out of scheduled activities listed below at the premises specified in A2. The activities are listed according to their scheduled activity classification, fee-based activity classification and the scale of the operation. Unless otherwise further restricted by condition of this licence, the scale at which the activity is carried out must not exceed the maximum scale specified in this condition.	Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023			Table 4.1 of each Annual Review documents the following tonnages of ROM coal extracted: <ul style="list-style-type: none"> 2020 – 16.6 2021 – 16.08 2022 – 12.41 The recorded tonnages are less than the maximum tonnage prescribed by this condition.	Complies	
	Table A1.1	Scheduled Activity	Fee Based Activity	Scale				
		Coal Works	Coal Works	>5000000T annual handling capacity				
		Crushing, Grinding or Separating	Crushing, Grinding or Separating	>1000000-500000 T annual processing capacity				
What the Licence Authorises and Regulates	Note: In relation to this licence, the licensee must comply with:					Refer to audit schedules for SSD 6464 (S2 C6 and S2 C7)	Complies	
	a) The activity scale limits imposed by the licence;					Refer to audit schedules for SSD 6464 (S2 C6 and S2 C7)	Complies	
	b) The activity scale limits which apply for the reporting period specified in this licence; and					Refer to audit schedules for SSD 6464 (S2 C6 and S2 C7)	Complies	
A 2.1	Premises or Plant to Which this Licence Applies	The Licence Applies to the following Premises					Noted	
	Table A2.1	Premises Details Warkworth Coal Mine - Putty Road Mt Thorley, NSW 2330	Premises defined by plan titled "Warkworth mining ltd – EPL 1376" including EPL boundary coordinates dated 16/10/2018 EPA Reference doc18/780507-06					
A 3.1	Other Activities	This licence applies to all other activities carried on at the premises, including;					Noted	
	Table A3.1	Ancillary Activity Sewage Treatment Systems						
A 4.1	Information Supplied to the EPA	Works and activities must be carried out in accordance with the proposal contained in the licence application, except as expressly provided by a condition of this licence. In this condition the reference to "the licence application" includes a reference to:					Noted	
		a) The applications for any licence (including former pollution control approvals) which this licence replaces under the <i>Protection of the Environment Operations (Savings and Transitional) Regulation 1998</i> ; and b) The licence information form provided by the licensee to the EPA to assist the EPA in connection with the issuing of this licence.						

Environment Protection Licence (EPL 1376) Warkworth Mining Ltd

Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
P.1.1	Location of Monitoring / Discharge Points and Areas	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.					Noted	
	Table P1.1	EPA identification	Type of Monitoring Point	Location Description				
		9	Particulate Matter Monitoring	Monitor "WML North Pit" at coordinates 316450, 6392620 (Easting Northing) identified as point 9 on Figure 1.				
		10	Particulate Matter Monitoring	Monitor "Dragline Crossing" at coordinates 318679, 6388113 (Easting Northing) identified as point 10 on Figure 1.				
		11	Particulate Matter Monitoring	Monitor "Heavy Vehicle Bridge" at coordinates 320800 6387890 (Easting Northing) identified as point 11 on Figure 1				
		12	Particulate Matter Monitoring	Monitor "MTIE" at coordinates 321656, 6388797 (Easting Northing) identified as point 12 on Figure 1.				
P1.2	Location of Monitoring /Discharge Points and Areas	The following utilisation areas referred to in the table below are identified in this licence for the purposes of the monitoring and/ or setting of limits for any application of solids or liquids to the utilisation area.					Noted	
P1.3	Location of Monitoring /Discharge Points and Areas	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					Noted	
	Table P1.3	EPA Identification Number	Type of Monitoring Point	Type of Discharge Point	Location Description			
		1	Hunter River Salinity Trading Scheme (HRSTS) discharge water volume monitoring and water quality monitoring	Hunter River Salinity Trading Scheme (HRSTS) discharge water volume monitoring and water quality monitoring	HRSTS discharge point at co-ordinates 320890, 6391530 (Easting, Northing) identified as point 1 on Figure 1.			
		14	Effluent quality monitoring, Discharge to utilisation area	Effluent quality monitoring, Discharge to utilisation area	North Pit North Crib Hut Envirocycle at co-ordinates 316432, 6392431 (Easting, Northing) identified as point 3 on Figure 2.			
		15	Effluent quality monitoring, Discharge to utilisation area	Effluent quality monitoring, Discharge to utilisation area	Main Warkworth Staging Pond at co-ordinates 321362, 6389974 (Easting, Northing) identified as point 13 on Figure 2.			
		16	Effluent quality monitoring		Warkworth Admin envirocycle at co-ordinates 321615, 6389665 (Easting, Northing) identified as point 6 on Figure 2			
		17	Effluent quality monitoring		West Pit South crib hut envirocycle at co-ordinates 318212, 6387979(Easting, Northing) identified as point 1 on Figure 2.			
		18	Effluent quality monitoring		Warkworth medical centre envirocycle at co-ordinates 321477, 6389686 (Easting, Northing) identified as point 10 on Figure 2			
		24		Discharge to pipe	Transfer of mine water to Hunter Valley Operations (HVO) EPL 640 at 317688, 6393339 Easting, Northing)			
		25	Water Quality Monitoring		Continuous turbidity monitor at co-ordinates 320846, 6391510 (Easting, Northing) in staged discharge dam near to the points at which water is discharged from EPA Point 1, shown in DOC20/83395.			
		26	Ambient water quality monitoring		Hunter River at Co-ordinates 324425, 6390600 (Easting, Northing) shown as W1 on Figure 3.			
		27	Ambient water quality monitoring		Hunter River at co-ordinates 324291, 6390530 (Easting, Northing) shown as W2 on Figure 3.			
		28	Ambient water quality monitoring		Hunter River at co-ordinates 324650, 6390530 (Easting, Northing) shown as W3 on Figure 3.			
		29	Ambient water quality monitoring		Loders Creek at co-ordinates 323505, 6386553 (Easting, Northing) shown as W5 on Figure 3			
		30	Ambient water quality monitoring		Dights Creek at co-ordinates 318909, 6393389 (Easting, Northing) shown as WW5 on Figure 3.			
		31	Ambient water quality monitoring		Wollombi Brook Downstream at co-ordinates 311914, 6391104 (Easting, Northing) shown as SW40 on Figure 3.			
		32	Ambient water quality monitoring		Wollombi Brook at co-ordinates 314419, 3691104 (Easting, Northing) shown as Wollombi Brook on Figure 3.			
33	Ambient water quality monitoring		Wollombi Brook upstream at co-ordinates 316712, 6385125 (Easting, Northing) shown as Wollombi Brook Upstream on Figure 3.					
P1.3	Location of Monitoring /Discharge Points and Areas	The following points referred to in the table are identified in this licence for the purposes of the monitoring and/ or the settling of limits for discharges or pollutants to water from this point.					Noted	

Environment Protection Licence (EPL 1376) Warkworth Mining Ltd								
Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
P 1.4	Location of Monitoring /Discharge Points and Areas	The following points referred to in the table below are in this licence for the purposes of weather and/ or noise monitoring and/ or setting limits for the emission of noise from the premises.					Noted	
	Table P1.4	EPA Number	Type of Monitoring Point	Location Description				
		4	Air blast overpressure & ground vibration peak particle velocity monitoring	Blast monitor "Warkworth" at coordinates 314311, 6394906 (Easting, Northing) identified as point 4 on Figure 1.				
		5	Air blast overpressure & ground vibration peak particle velocity monitoring	Blast monitor "Wambo Road" at coordinates 313263, 6388714 (Easting, Northing) identified as point 5 on Figure 1.				
		6	Air blast overpressure & ground vibration peak particle velocity monitoring	Blast Monitor "Bulga Village" at coordinates 314252, 6385592 (Easting, Northing) identified as point 6 on Figure 1.				
		7	Air blast overpressure & ground vibration peak particle velocity monitoring	Blast monitor "Wollemei Peak Road" at coordinates 315133, 6384578 (Easting, Northing) identified as point 7 on Figure 1.				
		8	Air blast overpressure & ground vibration peak particle velocity monitoring	Blast monitor "Putty Road - MTIE" at coordinates 322584, 6389730 (Easting, Northing) identified as point 8 on Figure 1				
13	Meteorological Station to determine meteorological conditions for noise monitoring	Charlton Ridge weather station at coordinates 318484, 6387405 (Easting, Northing) identified as M4.1 on Figure 1.						
P1.5	Location of Monitoring /Discharge Points and Areas	Figure 1 in conditions P1.1, P1.3 and P1.4 refers to plan titled "Warkworth Mining Ltd. EPL 1376" Monitoring Points dated 16/10/2018 EPA Reference DOC18/780507-06..					Noted	
P1.6	Location of Monitoring /Discharge Points and Areas	Figure 2 in conditions P1.3 refers to plan titled "Warkworth Mining Ltd. EPL 1376 Sewage Treatment Systems" dated 20/11/19 EPA Reference DOC19/899218-3.					Noted	
P1.7	Location of Monitoring /Discharge Points and Areas	Figure 3 in condition P1.3 refers to plan titled "EPL 1376 Ambient Surface Water Monitoring Locations" dated 29/1/2020 in EPA Reference DOC20/83395.					Noted	
P 1.8	Location of Monitoring /Discharge Points and Areas	The datum for grid references in this licence is the Geodetic Datum of Australia 1994 (GDA94), Zone 56					Noted	
L1.1	Pollution of Waters	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.	Annual Return (AR) Non-Compliance Detail Licence Number 1376, 01 Dec 2021 – 30 November 2022 (EPA Website) Annual Return Non-Compliance Detail Licence Number 1376, 01 Dec 2020 – 30 November 2021 (EPA Website) Annual Return Non-Compliance Detail Licence Number 1376, 01 Dec 2019 – 30 November 2020 (EPA Website)			The following non-compliances (generally associated with over topping of dams) were identified by the Annual Returns <ul style="list-style-type: none"> WML Sediment Dams 53N, 54N and WML sump 5N overtopped as a result of heavy rainfall - 5 in total non-compliances reported (2022 AR) WML Sediment Dams 53N, 54N, 55N, 46 N SSD 09 - 4 in total (2021 AR) WML sediment dams 50N and 53N overtopped as a result of heavy rainfall 	Non-compliant	A risk assessment and review of the storage capacity of the retention dams be undertaken that takes into account the increasing risk of extreme weather events, including extended duration wet weather patterns.
L2.1	Concentration Limits	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.	Annual Return – Warkworth Mining Ltd, Licence 1376 dated 27 January 2021 Annual Return – Warkworth Mining Ltd, Licence 1376 dated 27 January 2022 Annual Return – Warkworth Mining Ltd, Licence 1376 dated 23 January 2023			Recorded values as documented in Section B3 of each Annual Return comply with the both the pH and TSS limits in this table.	Complies	
L2.2	Concentration Limits	Where a pH quality limit is specified in the table, the specified percentage of samples must be within the specified ranges.					Complies	

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Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations	
L2.3	Concentration Limits	To avoid any doubt, this condition does not authorise the pollution of waters by any pollutant other than those specified in the table/s.					Noted		
L2.4	Concentration Limits	Water and/ or Land Concentration Limits.							
	Table L2.4	Point 1							
		Pollutant	Units of Measure	100 percentile concentration					
		pH	pH	6.5-9.5					
		TSS	Milligrams per litre	120					
L3.1	Volume and Mass Limits	For each discharge point or utilisation area specified below (by a point number), the volume/ mass of: a) Liquids discharged to water; or	Annual Return – Warkworth Mining Ltd, Licence 1376 dated 27 January 2021 Annual Return – Warkworth Mining Ltd, Licence 1376 dated 27 January 2022			Monitoring Point 1 relates to the HRTS discharge point, as noted in Section B3 of each Annual Return, there were no HRTS discharges during the audit period.	Complies		
		b) Solids or liquids applied to the area; must not exceed the volume/ mass limit specified for that discharge point or area.	Annual Return – Warkworth Mining Ltd, Licence 1376 dated 23 January 2023				Complies		
L3.1	Table L3.1								
		Point	Unit of Measure	Volume /Mass Limit					
		1	Megalitres per day	100					
	Waste	The licensee must not cause, permit or allow any waste to be received at the premises, except the wastes expressly referred to in the column titled "Waste" and meeting the definition, if any, in the column titled "Description" in the table below. Any waste received at the premises must only be used for the activities referred to in relation to that waste in the column titled "Activity" in the table below. Any waste received at the premises is subject to those limits or conditions, if any, referred to in relation to that waste contained in the column titled "Other Limits" in the table below.		Environment and Community Manager – No wastes are received from any off-site sources.	No evidence of the storage of wastes from other sites was observed during this IEA.	Waste (other than those approved by this condition) is not received at the Premises	Complies		
L4.1	Table	Waste	Description	Activity	Other Limits				
		Biosolids categorised as unrestricted use, or as restricted use 1, 2 or 3, in accordance with the criteria set out in the biosolids guidelines	Soil amendment for rehabilitation of mining land		The Licensee must comply with the Biosolids Exemption 2014				
		Fly ash	Dry phase coal ash from Redbank Power Station for use as soil amendment and in rehabilitation of mine	As specified in each particular resource recovery exemption	The coal ash exemption 2017 must be complied with.				
		Stormwater	To be used for dust mitigation and other mining purposes	As specified in each particular resource recovery exemption	The stormwater exemption 2014 must be complied with.				
		Coal Washery Reject	To be applied to land for rehabilitation of coal mine	As specified in each particular resource recovery exemption	The Mount Thorley -Warkworth Operations Exemption 2010 must be complied with.				
		Excavated natural material	Overburden from mining at MTO Complex to create final landforms	As specified in each particular resource recovery exemption	The Excavated natural material exemption 2014 must be complied with.				
		Gypsum plaster board	Soil amendment for rehabilitation of mining land	As specified in each particular resource recovery exemption	The Recovered plasterboard exemption 2014 must be complied with.				
Compost (The compost exemption 2016-NSW EPA)	Soil amendment for rehabilitation of mining land	As specified in each particular resource recovery exemption	The Compost Exemption 2016 must be complied						

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Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
L4.2	Waste	The Licensee is authorized to receive mine water from Mt Thorley Mine, Bulga Mine, Hunter Valley Operations Mine and Redbank Power Station for storage and use in activities authorized by this licence.	2020 Annual Review 2021 Annual Review 2022 Annual Review (Draft)			Water transfers are reported in Annual Reviews: <ul style="list-style-type: none"> 2020 s6.7.2 – nil transfers to/from mines/Redbank 2021 s6.7.2 – nil transfers to/from mines/Redbank 2022 s6.7.2 – nil transfers to MTW. 190ML transferred to other mines (Bulga Mine) 	Noted	
L4.3	Waste	The Licensee must not store more than 100 tonnes (equivalent to 30 heavy Plant-tyres) of heavy plant waste tyres on the premises at any one time.		Environment and Community Manager - Waste tyres are not stored at WML premises. This occurs at MTO	No tyre storage was sighted on the Warkworth site.	Waste tyres are not stored at WML premises	Complies	
L5.1	Blasting	The air blast overpressure level from blasting operations in or on the premises must not exceed;115 dB (Lin Peak) at any time; at either monitoring point 4, 5,6,7 or 8 in Condition P1.4.	Blasting Records – 2020 Blasting Records – 2021 Blasting Records – 2022 Blasting Records – 2023			Air blast over pressure records demonstrated compliance with this requirement	Complies	
L5.2	Blasting	The air blast overpressure level from blasting operations in or on the premises must not exceed: 120 dB (Lin Peak) at any time; At either monitoring point 4, 5, 6, 7 or 8 in Condition P1.4.	Year to Date Blasting Records – 2020 Year to Date Blasting Records – 2021 Year to Date Blasting Records – 2022 Year to Date Blasting Records – 2023			The 2022 Annual Return reported that blast event n39-bfb-md1 & n39-bfb-ps1c produced an air blast overpressure of 125.5 dB received at the Warkworth monitoring station (EPA Point 4). The blast was investigated, and it was determined that the overpressure reading did not occur at a residential property, therefore the incident is not considered to be a non-compliance.	Complies	
L5.3	Blasting	The ground vibration peak particle velocity from blasting operations carried out in or on the premises must not exceed; 5mm/ second for more than 5% of the total number of blasts during each reporting period; At either monitoring point 4, 5, 6, 7 or 8 in Condition P1.4	Blasting Records – 2020 Blasting Records – 2021 Blasting Records – 2022 Blasting Records – 2023			All vibration results recorded were less than 5mm/s	Complies	
L5.4	Blasting	The ground vibration peak particle velocity from blasting operations carried out in or on the premises must not exceed: a) 10mm/ second at any time; b) At either monitoring point 5, 6, 7 or 8, in Condition P1.4	Blasting Records – 2020 Blasting Records – 2021 Blasting Records – 2022 Blasting Records – 2023			All vibration results recorded were less than 5mm/s	Complies	
L5.1	Blasting	Blasting in or on the premises must only be carried out between 0700 hours and 1800 hours, Monday to Saturday. Blasting on the premises must not take place on Sundays or Public Holidays without prior approval of the EPA.	Blasting Records – 2020 Blasting Records – 2021 Blasting Records – 2022 Blasting Records – 2023	Environment and Community Manager - no blasting was undertaken outside of approved hours during the audit period.		The records include the date and time of each blast.	Complies	
L5.6	Blasting	Offensive blast fume must not be emitted from the premises. <i>Offensive blast fume means post-blast gases from the detonation of explosives at the premises that by reason of their nature, duration, character or quality, or the time at which they are emitted, or any other circumstances;</i> 1. Are harmful to (or likely to be harmful) a person that is outside the premises from which it is emitted, or 2. Interferes unreasonably with (or is likely to interfere unreasonably with) the comfort or repose of a person who is outside the premises from which it is emitted.	Complaints Register Incident Register			Nine complaints were received during the audit period relating to blast impacts. Each complainant was investigated by MTW and no evidence of blast fume emissions from the site were identified.	Complies	

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Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
O1.1	Activities to be carried out in a competent manner	Licensed activities must be carried out in a competent manner. This includes: a) The processing, handling, movement and storage of materials and substances used to carry out the activity; and			Activities on site were observed to be undertaken in a competent manner effective management controls, supervision and management systems implemented to ensure compliance	Activities on site were observed to be undertaken in a competent manner effective management controls, supervision and management systems implemented to ensure compliance	Complies	
		b) The treatment, storage, processing, reprocessing, transport and disposal of waste generated by the activity.			All waste activities observed on site were appropriate to the scale and nature of the operations	All waste activities observed on site were appropriate to the scale and nature of the operations	Complies	
O2.1	Maintenance of Plant and Equipment	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	Plant and Equipment maintenance records.	Maintenance Manager demonstrated the operation of the mine Maintenance Management System. The system provides a framework for the management of routine maintenance and the identification and rectification of plant and equipment issues.	Designated equipment maintenance areas were inspected. Complex management systems and equipment are implemented to plan and record routine servicing and unplanned maintenance for items of plant, including coal trucks, drill rigs etc.	Designated equipment maintenance areas were inspected. Complex management systems and equipment are implemented to plan and record routine servicing and unplanned maintenance for items of plant, including coal trucks, drill rigs etc. The maintenance management system implemented at the mine are designed to ensure the efficient operation of plant and equipment were comprehensive	Complies	
		b) Must be operated in a proper and efficient manner.			Equipment observed during the site audit was observed to be operating in a proper and efficient manner. A Systems implemented to ensure the efficient operation of plant and equipment were comprehensive	Equipment observed during the site audit was observed to be operating in a proper and efficient manner.	Complies	
O2.2	Maintenance of Plant and Equipment	The sewage treatment system must be serviced by a suitably qualified and experienced wastewater technician at least once in each quarterly period and a minimum of four times per year.	Quarterly maintenance records			Quarterly maintenance records were sighted covering the audit period.	Complies	
O2.3	Maintenance of Plant and Equipment	The licensee must record each inspection and any actions required or recommended by the technician including all results of tests performed on the sewage treatment system by the technician as required in Condition O2.2.	Quarterly maintenance records			Quarterly sewage plant maintenance records were sighted and found to comply with this condition.	Complies	
O2.4	Maintenance of Plant and Equipment	The licensee must prepare a sewage treatment system maintenance program. The program must include; a) Provide written records of each quarterly inspection.	Quarterly maintenance records			Quarterly sewage plant maintenance records were sighted and found to comply with this condition.	Complies	
		b) Date, time and results of all routine maintenance procedures undertaken to the sewage treatment system; and	Quarterly maintenance records			Quarterly sewage plant maintenance records were sighted and found to comply with this condition.	Complies	
		c) Certification from a technician that the sewage system is operating at its capacity	Quarterly maintenance records			Quarterly sewage plant maintenance records were sighted and found to comply with this condition.	Complies	

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Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
O3.1	Dust	The premises must be maintained in a condition which minimizes or prevents the emission of dust from the premises.	Air Quality Management Plan, Mt Thorley Warkworth, Rev 4.1 dated 28 July 2022 Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023		During the site inspection, the Auditor observed water carts in operation. The auditor noted that minor dust was being generated within the operating open cut and on haul roads, and in areas that were being stripped in preparation for mining, although not evidence that visual dust was leaving the site at the time of the site inspection. Significant areas of the site have been cleared and progressive rehabilitation works are behind schedule. The Auditor also observed significant areas, that while not ready for final rehabilitation, would benefit from temporary stabilisation to help reduce dust emissions during adverse wind conditions.	Fifty-eight dust-related complaints were received during the audit period. Significant areas of the site have been cleared and progressive rehabilitation works are behind schedule. The Auditor also observed areas, that while not ready for final rehabilitation, would benefit from temporary stabilisation to help reduce dust emissions during adverse wind conditions. While no exceedances in dust criteria were reported during the audit period, the number of dust related complaints and the Auditor's observations relating to rehabilitation and stabilisation indicate that nuisance dust emissions are being generated by the mine.	Non-compliant	Increase the rate of progressive rehabilitation works with the objective of meeting the established progressive rehabilitation targets. Prepare and implement a program for the stabilisation of unsealed / disturbed areas of the site including stockpiles, finished landforms, and disturbed areas that are not currently being actively worked / filled). The program should identify and classify all areas of the site that are currently disturbed according to the dust generation potential of those areas and establish clear targets for the stabilisation of those areas (either permanent or temporary) with the objective of meeting the requirements of the Blue Book.
O3.2	Dust	All trafficable areas, coal storage and vehicle manoeuvring areas in or on the premises must be maintained, at all times, in a condition that will minimise the generation, or emission from the premises, of wind-blown or traffic generated dust.			Trafficable areas are well delineated. Water carts were in operation at the time of the IEA site inspection.	As observed during the audit inspection. Guideposts have been installed to define trafficable areas and restrict vehicle movements to those areas. Water carts were in operation.	Complies	
O3.3	Dust	All operations and activities occurring at the premises must be carried out in a manner that will minimise the emission of dust from the premises.	Air Quality Management Plan, Mt Thorley Warkworth, Rev 4.1 dated 28 July 2022		The operations observed during the site audit were being managed appropriately to minimise dust generation.	As observed during the audit inspection all operational areas of the site were managed appropriately to minimise the generation of dust. Water carts are deployed to wet down internal roads and minimise dust generation. It was noted (see Condition O3.1 above) however that the site contains significant areas that have been disturbed and would be sources of windblown dust.	Complies	
O4.1	Effluent application to land	Application of wastewaters must only be applied at a rate that can be assimilated by the effluent discharge utilisation area and its evapotranspiration capacity.			No evidence of effluent ponding or uncontrolled discharges were observed.	No evidence of effluent ponding or uncontrolled discharges were observed.	Complies	
O4.2	Effluent application to land	The license must ensure that the effluent discharge utilisation area perimeter is fenced and signposted "Effluent Re-Use Area Keep Out" and controlled in a manner to ensure exclusion of persons from that area.			The effluent irrigation area is fenced and signposted (Photograph 8).	The effluent irrigation area is fenced and signposted (Photograph 8).	Complies	

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Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
O5.1	Emergency Response	The licensee must maintain, and implement as necessary, a current Pollution Incident Response Management Plan (PIRMP) for the premises. The licensee must always keep the incident response plan on the premises. The incident response plan must document systems and procedures to deal with all types of incidents (e.g. spills, explosions or 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. The licensee must develop a Pollution Incident Response Management Plan in accordance with the requirements in Part 5.7A of the Protection of the Environment Operations (POEO) Act 1997 and POEO regulations.	Pollution Incident Response Management Plan – Mount Thorley Warkworth, revision 10 dated 1 October 2019. EPA Website – Summary Licence 1376			The PIRMP is placed on the MTW website and includes the following information: <ul style="list-style-type: none"> Regulatory requirements and duty to notify Environmental hazards and pollution inventory Key contact details Notification procedure (internal and external) Emergency Contact details Training, testing, reviewing and communicating the plan The EPA website notes the latest test of the PIRMP was undertaken on the 4 th of November 2022. The next testing for the PIRMP is scheduled for 4 November 2023.	Complies	
O6.1	Heavy Plant-Tyre Disposal	The Licensee is authorised to dispose of heavy Plant-tyre waste generated on the premises, in the pit. The Licensee must:			Used heavy vehicle tyres are used on site to demarcate haul routes and on-site roads.	Heavy plant tyres are reused on-site where appropriate.	Complies	
		a) ensure that heavy Plant waste tyres are re-used on the premises as much as practical;						
		b) ensure that any surplus heavy Plant waste tyres can be emplaced by being spread out on the pit-floor and buried as deep as practical, but, covered by at least 20m of inert material beneath any final rehabilitated surface;		Environment and Community Manager - Waste tyres are buried within the mine pit (cannot leach into watercourse). Heavy Plant Disposal, which includes the Non-mineral waste management procedure, Scrap Tyre process flowchart, and Tyre and Rim Management Plan.	No evidence of inappropriate disposal was observed by the Auditor.	MTW has developed and issued procedures for waste tyre management. No evidence of inappropriate disposal was observed by the Auditor.	Complies	
		c) place the tyres at least 10m away from coarse reject material or tailings emplacement areas;					Complies	
		d) not place any tyres near heated material; and					Complies	
		e) not place any tyres in an area likely to leach to any watercourse					Complies	
O7.1	Other Operating Conditions	All above ground tanks containing material that is likely to cause environmental harm must be bunded or have an alternative spill containment system in place.			Above ground tanks used for fuels and oils were observed to have appropriate bunding and spill control systems in place (Photograph 9).	Above ground tanks used for fuel and other liquids were observed to have appropriate bunding and spill control systems in place.	Complies	
M1.1	Monitoring Records	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.					Noted	
M1.2	Monitoring Records	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;	Monthly Environmental Monitoring Reports (MTW Website)			All records reviewed during the audit were in a legible form.	Complies	
		b) Kept for at least 4 years after the monitoring or event to which they relate took place; and	Monthly Environmental Monitoring Reports (MTW Website)			Monitoring records from 2017 were sighted on the MTW website.	Complies	
		c) Produced in a legible form to any authorized officer of the EPA who asks to see them					Noted	

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Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations	
M1.3	Monitoring Results	The following records must be kept in respect of any samples required to be collected for the purposes of this licence; a) The date(s) on which the sample was taken;	MTW surface water sampling and testing records			Surface water and effluent sampling and testing records were sighted including monthly consultant reports from AECOM. The records include description of the approved AS methods, COC, and lab results. This includes this information required by M1.3 being sample dates, times, point and sampler's name.	Complies		
		b) the time(s) at which the sample was collected;					Complies		
		c) The point at which the sample was taken; and					Complies		
		d) The name of the person who collected the sample					Complies		
M2.1	Requirement to monitor concentration of pollutants discharged	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.	Annual Return (AR) Non-Compliance Detail Licence Number 1376, 01 Dec 2021 – 30 November 2022 (EPA Website) Annual Return Non-Compliance Detail Licence Number 1376, 01 Dec 2020 – 30 November 2021 (EPA Website)			The required sampling and testing is being undertaken.	Complies		
M2.2	Requirement to monitor concentration of pollutants discharged	Air Monitoring Requirements:	Annual Return Non-Compliance Detail Licence Number 1376, 01 Dec 2019 – 30 November 2020 (EPA Website)			As reported in the 2020, 2021 and 2022 Annual Returns, EPL 1376 requires continuous monitoring for EPA air monitoring Points 9, 10, 11 and 12. Monitoring data capture was >93%, but not continuous during the reporting period (4 occurrences)	Non-compliant	Ensure that all continuous monitoring equipment is operational and well maintained.	
	Table M2.2	Point 9,10,11,12							
		Pollutant	Units of Measure	Frequency	Sampling method				
		PM10	Micrograms per cubic metre	continuous	Special Method 1				
M 2.3	Requirement to monitor concentration of pollutants discharged	Water and/or Land Monitoring Requirements	Annual Return (AR) Non-Compliance Detail Licence Number 1376, 01 Dec 2021 – 30 November 2022 (EPA Website) Annual Return Non-Compliance Detail Licence Number 1376, 01 Dec 2020 – 30 November 2021 (EPA Website) Annual Return Non-Compliance Detail Licence Number 1376, 01 Dec 2019 – 30 November 2020 (EPA Website)			As reported in the 2001 and 2022 Annual Returns, EPL water monitoring Points 26, 27, 28 and 30 were unable to be sampled due to sample area either unsafe to access due to rain events resulting in flooding, or being dry at time of sampling (6 occurrences)	Non-compliant	Access to the sampling sites was not possible due to adverse weather conditions. No further actions are recommended.	
	Table M2.3	Point 1							
			Pollutant	Units of Measure	Frequency				Sampling method
			Conductivity	micro siemens per centimetre	Continuous during discharge				A probe designed to measure the range 0 to 10,000 uS/cm
			pH	pH	Daily during any discharge				Grab sample
			Total Suspended Solids	milligrams per litre	Daily during any discharge				Grab sample
		Point 14,15,16,17,18							
			Faecal Coliforms	colony forming units per 100 millilitres	Quarterly				Grab sample
			pH	pH	Quarterly				Grab sample
		Point 25							
			Turbidity	nephelometric turbidity units	Continuous during discharge				Probe
		Point 26,27,28,29,30,31,32,33							
			Electrical Conductivity	micro siemens per centimetre	Quarterly				Grab sample
			pH	pH	Quarterly				Grab sample
	Total Suspended Solids	milligrams per litre	Quarterly	Grab sample					

Environment Protection Licence (EPL 1376) Warkworth Mining Ltd								
Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
M 3.1	Testing Methods – Concentration Limits	Monitoring for the concentration of a pollutant emitted to the air required to be conducted by this licence must be done in accordance with: <ul style="list-style-type: none"> 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. 	Air Emission Testing Records covering the audit period.	Environment and Community Manager - Monitoring is done in accordance with Special Method 1 - manufacturers operating manual for the Dustraks. The manufacturers operating manual, evidence of an annual calibration certificate, maintenance register are maintained by MTW.		Air quality monitoring is undertaken by approved methods.	Complies	
M3.2	Testing Methods – Concentration Limits	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 unless another method has been approved by the EPA in writing before any tests are conducted.	Water Testing Records covering the audit period.			Water testing is undertaken by approved methods.	Complies	
M3.3	Testing Methods – Concentration Limits	Sampling, storage and analysis of electrical conductivity by grab sample is permitted to be undertaken in accordance with AECOM Australia Method; Conductivity by classical using APHA 2510 B (EPA approval DOC18/17513-08).					Noted	
M3.4	Testing Methods – Concentration Limits	Sampling, storage and analysis of pH by grab sample is permitted to be undertaken in accordance with AECOM Australia Method; pH by classical using APHA 4500 H+B (EPA Approval DOC18/17513-08).					Noted	
M4.1	Weather Monitoring	At the point(s) identified below, the licensee must monitor (by sampling and obtaining results by analysis) the parameters specified in Column 1 of the table below, using the corresponding sampling method, units of measure, averaging period and sampling frequency, specified opposite in the Columns 2, 3, 4 and 5.				As reported in the 2021 and 2022 Annual Returns, EPL 1376 requires continuous monitoring for Charlton Ridge Meteorological Station. Monitoring data capture was >99%, but not continuous during the reporting period.	Non-compliant	Ensure that all continuous monitoring equipment is operational and well maintained.
		Parameter	Sampling Method	Units of Measure	Averaging Period	Frequency		
		Rainfall	AM-4	Millimetres	10 minutes	Continuous		
		Temperature at 2 metres	AM-2 &AM4	Degrees Celsius	10 minutes	Continuous		
		Wind Speed at 10 Metres	AM-2 &AM4	Metres per second	10 minutes	Continuous		
		Wind Direction at 10 Metres	AM-2 &AM4	Degrees	10 minutes	Continuous		
Sigma Theta	Special Method 2	Degrees	10 minutes	Continuous				
M5.1	Recording of Pollution Complaints	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			The complaints register provided to the Auditor was legible.	Complies	
M5.2	Recording of Pollution Complaints	The record must include details of the following:	Complaints Register			The date and time of complaints are recorded on the MTW complaints register	Complies	
		a) The date and time of the complaint;	Complaints Register			The Complaints Register includes the details of how the complaint was made.	Complies	
		b) The method by which the complaint was made;	Complaints Register			The name of the complainant is recorded on the MTW complaints register	Complies	
		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	Complaints Register			The name of the complainant is recorded on the MTW complaints register	Complies	
		d) The nature of the complaint;	Complaints Register			The complaints register includes the details of the immediate actions taken	Complies	
e) The action taken by the licensee in relation to the complaint, including any follow-up contact with the complainant; and	Complaints Register							

Environment Protection Licence (EPL 1376) Warkworth Mining Ltd											
Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations			
M5.2	Recording of Pollution Complaints	f) If no action was taken by the licensee, the reasons why no action was taken.	Complaints Register			The Complaints Register includes, when appropriate, details of why no action was taken.	Complies				
M5.3	Recording of Pollution Complaints	The record of a complaint must be kept for at least 4 years after the complaint was made.	Complaints Register Website Complaints Summary			Details of complaints are kept for at least 4 years.	Complies				
M5.4	Recording of Pollution Complaints	The record must be produced to any authorised officer of the EPA who asks to see them.					Noted				
M6.1	Telephone complaints line	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.				The MTW website provides the details of a community complaints hotline which is available 24 hours a day.	Complies				
M6.2	Telephone complaints line	The licensee must notify the public of the complaints like telephone number and the fact that it is a complaints line so that the impacted community knows how to make a complaint.				The website clearly notes that the contact telephone number is a complaints line so there is no confusion.	Complies				
M6.3	Telephone complaints line	The preceding two conditions do not apply until 3 months after; the date of the issue of this licence.					Noted				
M7.1	Requirement to monitor volume or mass	For each discharge point or utilisation area specified below, the licensee must monitor; The volume of liquids discharged to water or applied to the area;	Annual Return – Warkworth Mining Ltd, Licence 1376 dated 27 January 2021 Annual Return – Warkworth Mining Ltd, Licence 1376 dated 27 January 2022 Annual Return – Warkworth Mining Ltd, Licence 1376 dated 23 January 2023			As noted in Section B2 (of each Annual Return), no HRTS discharge was undertaken during the reporting period	Complies				
		a) The mass of solids applied to the area.								The required monitoring data is provided in the Annual Reviews.	Complies
		b) The mass of pollutants emitted to the air;								The required monitoring data is provided in the Annual Reviews.	Complies
		c) At the frequency and using the method and units of measure, specified below.				The required monitoring data is provided in the Annual Reviews.	Complies				
M7.1	Table M7.1	Point 1									
		Frequency	Unit of Measure	Sampling Method							
		Continuous during discharge	megalitres per day	Ultrasonic flow meter							
M8.1	Blasting	To determine compliance with conditions L4.2, L4.3, L4.4 and L4.5; a) air blast overpressure and ground vibration levels must be measured and electronically recorded for monitoring points 5, 6, 7, 8, and 9 for the parameters specified in Column 1 of the table below; and	Blasting Records – 2020 Blasting Records – 2021 Blasting Records – 2022 Blasting Records – 2023			Blasting parameters measured and recorded include Vibration (mm/s) and Air blast Overpressure (dBL)	Complies				
		b) The licensee must use the units of measure, sampling method, and sample at the frequency specified opposite in the other columns.	Blasting Records – 2020 Blasting Records – 2021 Blasting Records – 2022 Blasting Records – 2023			Blasting parameters measured and recorded include Vibration (mm/s) and Air blast Overpressure (dBL)	Complies				
	Table M8.1	Parameter	Units of Measure	Frequency	Sampling Method						
		Airblast Overpressure	Decibels (Linear Peak)	All Blasts	Australian Standard AS 2187.2-2006						
		Ground Vibration Peak Particle Velocity	millimetres/second	All Blasts	Australian Standard AS 2187.2-2006						

Environment Protection Licence (EPL 1376) Warkworth Mining Ltd									
Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations	
M9.1	HRSTS Monitoring	HRSTS Monitoring – The licensee must continuously operate and maintain communication equipment which makes the conductivity and flow measurements, taken at Point 4 available to the “Service Coordinator” within one hour of those measurements being taken and makes them available in the format specified in the “Hunter River Salinity Trading Scheme Discharge Point Telemetry Specification – Rev V1.0 released 4 October 2018” as published by Water NSW.		Environment and Community Manager - Maintenance of the system is subject to a maintenance contract with Benchmark Monitoring. The WML system has not been used in the audit period, however it continues to be maintained with sensors and comms to the Water NSW telemetry system.			The WML system has not been used in the audit period, however it continues to be maintained	Complies	
M9.2	HRSTS Monitoring	The licensee must ensure that all monitoring data is within a margin of error of 5% for conductivity measurements and 10% for discharge flow measurement.	https://hydrotel.waternsw.com.au/hrsts.html				Monitoring data is provided to Water NSW and is available via their website.	Complies	
M9.3	HRSTS Monitoring	The licence must mark monitoring point(s) 4, with a sign which clearly indicates the name of the licensee, whether the monitoring point is up or down stream of the discharge point(s) and that it is a monitoring point for the Hunter River Salinity Trading Scheme.		Environment and Community Manager - WML discharge point has not been in operation during the audit period, and not since 2015 prior to the audit and the sign is no longer present. A new sign was actually ordered and received during the audit period and will be installed after the audit period.			The required signage was not installed at the time of this IEA.	Non-compliant	Ensure that signage for Monitoring Point 4 is installed.
M9.4	Requirement to Monitor Particulate Matter	The Licensee must record the average PM10 concentration at Monitoring Points 9, 10, 11 and 12 at intervals of 10 minutes. This data must be made available upon request by any Authorised Officer of the EPA who asks to see them.					Section B2 of each Annual Return provides records of PM10 concentrations recorded for points 9 10, 11 and 12	Complies	
R1.1	Reporting Condition	The licensee must complete and supply to the EPA an Annual Return in the approved form comprising;	Annual Return – Warkworth Mining Ltd, Licence 1376 dated 27 January 2021 Annual Return – Warkworth Mining Ltd, Licence 1376 dated 27 January 2022 Annual Return – Warkworth Mining Ltd, Licence 1376 dated 23 January 2023				Section A of each Annual Return includes a Statement of Compliance	Complies	
		1. A Statement of Compliance					Section B of each Annual Return includes a monitoring and complaints summary	Complies	
		2. A Monitoring and Complaints Summary					Section C of each Annual Return includes a statement of compliance with License conditions	Complies	
		3. A Statement of Compliance – Licence Conditions					Section D of each Annual Return includes a statement of compliance – Load based fee calculation	Complies	
		4. A Statement of Compliance – Load based Fee					Section E of each Annual Return includes a statement of compliance Requirement to prepare a PIRMP	Complies	
		5. A Statement of Compliance – Requirement to Prepare Pollution Incident Response Management Plan					Section F of each Annual Return includes a statement of compliance – Requirement to Publish Pollution Monitoring Data and	Complies	
		6. A Statement of Compliance – Requirement to Publish Pollution Monitoring Data and					Section G of each Annual Return includes a statement of compliance – Requirement to Publish Pollution Monitoring data	Complies	
		7. A Statement of Compliance - Environmental Management Systems and Practices							
		At the end of each reporting period, the EPA will provide to the licensee notification that the Annual Return is due.						Noted	

Environment Protection Licence (EPL 1376) Warkworth Mining Ltd								
Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
R1.2	Reporting Condition	The Annual Return must be prepared in respect of each reporting period, except as provided below. Note: The term "reporting period" is defined in the dictionary at the end of this licence. Do not complete the Annual Return until after the end of the reporting period.	Annual Return – Warkworth Mining Ltd, Licence 1376 dated 27 January 2021 Annual Return – Warkworth Mining Ltd, Licence 1376 dated 27 January 2022 Annual Return – Warkworth Mining Ltd, Licence 1376 dated 23 January 2023			Annual Returns were prepared and submitted for each reporting period during this audit period.	Complies	
R1.3	Reporting Condition	Where this licence is transferred from the licensee to a new licensee; a) The transferring licensee must prepare an Annual Return for the period commencing on the first day of the reporting period and ending on the date the application for the transfer of the licence to the new licensee is granted; and				EPL not transferred during the audit period	Noted	
R1.3	Reporting Condition	b) The new licensee must prepare an Annual Return for the period commencing on the date the applicant for the transfer of the licence is granted and ending on the last day of the reporting period.				EPL not transferred during the audit period	Noted	
R1.4	Reporting Condition	Where this licence is surrendered by the licensee or revoked by the EPA or Minister, the licensee must prepare an Annual Return in respect of the period commencing on the first day of the reporting period and ending on; a) In relation to the surrender of a licence – the date when notice in writing of approval of the surrender is given; or				The EPL won't be surrendered until after the operations are ceased	Noted	
		b) In relation to the revocation of the licence – the date from which notice revoking the licence operates.					Noted	
R1.5	Reporting Condition	The Annual Return for the reporting period must be supplied to the EPA via eConnect EPA or by registered post no 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).	EPA Public Register			The end date for each annual Return is 30 November 2020, 2021, and 2022 respectively. Submission dates for each annual return were as follows: <ul style="list-style-type: none"> 2022 – 24 January 2023 2021 – 27 January 2022 2020 – 27 January 2021 All annual Returns for the reporting period were therefore submitted within the timeframes as required by this condition	Complies	
R1.6	Reporting Condition	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.					Noted	
R1.7	Reporting Condition	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	Annual Return – Warkworth Mining Ltd, Licence 1376 dated 27 January 2021 Annual Return – Warkworth Mining Ltd, Licence 1376 dated 27 January 2022			Each Annual Return was signed by Directors	Complies	
		b) By a person approved in writing by the EPA to sign on behalf of the licence holder	Annual Return – Warkworth Mining Ltd, Licence 1376 dated 23 January 2023			Each Annual Return was signed by Directors	Complies	

Environment Protection Licence (EPL 1376) Warkworth Mining Ltd

Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
R2.1	Notification of Environmental Harm	Notifications must be made by telephoning the Environmental Line service on 131 555.	Incident Register EPA Correspondence verifying receipt of incident reports.			There are several examples where incidents have occurred with the potential to cause environmental harm to have been notified the EPA. These include (but are not limited to): <ul style="list-style-type: none"> Water release from dam 9s Spillway (14 May 2020) Water from equipment park area (4 January 2021) The auditee has maintained records of notifications to the EPA as well as activation of the PIRMP	Complies	
R2.2	Notification of Environmental Harm	The licensee must provide written details of the notification to the EPA within 7 days of the date on which they became aware of the incident.	Incident Register EPA Correspondence verifying receipt of incident reports.			A total of 11 incidents have been notified to the EPA during the reporting period. This includes 7 relating to Water Discharge, 1 Blasting and 3 Noise.	Complies	
R2.2	Notification of Environmental Harm	Note: The licensee or its employees must notify all relevant authorities of incidents causing or threatening material harm to the environment immediately after the person becomes aware of the incident in accordance with the requirements of Part 5.7 of the Act.	Incident Register EPA Correspondence verifying receipt of incident reports.			There are several instances where overtopping of sediment basins has resulted in the activation of the pollution incident response and the notification of relevant authorities.	Complies	
R3.1	Written Report	Where an authorised officer of the EPA suspects on reasonable grounds that; <ul style="list-style-type: none"> a) Where this licence applies to premises, an event has occurred at the premises, the authorised officer may request a written report of the event.; or 					Noted	
		<ul style="list-style-type: none"> b) Where this licence applies to vehicles or mobile to the environment (whether the harm occurs on or off the premises to which the licence applies), the authorised officer may request a written report of the event. 					Noted	
R3.2	Written Report	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.	Incident Register EPA Correspondence verifying receipt of incident reports.			Reports have been submitted to EPA in accordance with agreed timeframes. In some instances, extensions to timeframes have been sought and agreed with EPA	Complies	
R3.3	Written Report	The request may require a report which includes any or all of the following information; <ul style="list-style-type: none"> a) The cause, time and duration of the event 	Letter from Yancoal (G.Mulhearn) to EPA S James titled "REF-NO/EPA130626 Sediment Dam overtopping Event (Dam 53N) Warkworth Mining Limited (WML) dated 14 October 2022			There have been several incidents reported to EPA where a report has been submitted following the event. The reports have been prepared in response to EPA requests,	Complies	
		<ul style="list-style-type: none"> b) The type, volume and concentration of every pollutant discharged as a result of the event; 					Noted	
		<ul style="list-style-type: none"> 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; 					Noted	
		<ul style="list-style-type: none"> d) The name, address and business hours telephone number of every other person (of whom the licence is aware) who witnessed the event, unless the licensee has been unable to obtain the information after making reasonable effort 					Noted	
		<ul style="list-style-type: none"> e) Action taken by the licensee in relation to the event, including any follow up contact with any complaints; 					Noted	

Environment Protection Licence (EPL 1376) Warkworth Mining Ltd								
Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
R3.3	Written Report	f) Details of any measure taken or proposed to be taken to prevent or mitigate against a recurrence of such an event; and					Noted	
		g) Any other relevant matters.					Noted	
R3.4	Written Report	The EPA may make a written report 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.					Noted	
R 4.1	Notification of Pollution of Waters	The Licensee must notify the EPA by telephoning the Environment Line service on 131555 immediately after the Licensee becomes aware of any contravention or potential contravention of Condition L1 of the Licence	Incident Register EPA Correspondence verifying receipt of incident reports.			There have been several events that have resulted in the release of water from the site and the activation of the PIRMP. Evidence was provided that demonstrates the EPA were notified immediately when the Licensee became aware of any event.	Complies	
R 4.2	Notification of Pollution of Waters	The Licensee must provide written details of the notification to the EPA Director Hunter at hunter.region@epa.nsw.gov.au within 7 days of the date of the notification.	Incident Register EPA Correspondence verifying receipt of incident reports.			A total of 11 incidents have been notified to the EPA during the reporting period. This includes 7 relating to Water Discharge, 1 Blasting and 3 Noise.	Complies	
R 5.1	HRSTS Reporting	The licensee must compile a written report of the activities under the Scheme for each scheme year. The scheme year shall run from 1 July to 30 June each year. The written report must be submitted to the EPA's regional office within 60 days after the end of each scheme year and be in a form and manner approved by the EPA. The information will be used by the EPA to compile an annual scheme report.		Environment and Community Manager - No discharges during the audit period for WML.		No discharges during the audit period for WML. Annual HRSTS reports were issued to the EPA for each year during the audit period.	Complies	
R 5.2	HRSTS Reporting	The Licensee must include graphical analysis of turbidity measured at EPA Point 25 for the length of any discharges from EPA Point 1 within the HRSTS Report that includes the two-hour period prior to the commencement of any discharge from EPA Point 1 and the two-hour period after any discharge from EPA Point 1.				No discharges during the audit period for WML. Annual HRSTS reports were issued to the EPA for each year during the audit period.	Complies	
R 5.3	Blast Exceedance Reporting	The licensee must report any exceedance of the licence blasting limits to the regional office of the EPA as soon as practicable after the exceedance becomes known to the licensee or to one of the licensee's employees or agents.					Noted	
R 5.4	Blast Monitoring Report	The results of the blast monitoring required by condition M8.1 must be submitted to the EPA at the end of each reporting period.	Blasting Records – 2020 Blasting Records – 2021 Blasting Records – 2022 Blasting Records – 2023	Environment and Community Manager - The annual blast reports are submitted with the maintenance program		The annual blast reports are submitted with the maintenance program	Complies	
R 5.5	Sewage Treatment Plant Maintenance	The sewage treatment system maintenance program required by Condition O2.4 must be submitted annually to the EPA with the Annual Return.	Letter from MTW (G Mulhearn) to the EPA titled "Warkworth Mining Limited Environment Protection Licence (EPL 1376) – Sewage Treatment Plant Maintenance Program Records", dated 3 January 2021, 15 January 2022 and 23 January 2023	Environment and Community Manager - The STP maintenance reports are submitted with the maintenance program		The STP Maintenance reports are submitted with the maintenance program	Complies	
R 5.6	Sewage Treatment Plant Maintenance	The licensee must retain a copy of each report required by Condition O2.3 for 3 years from the date each record is made.	STP Maintenance Records.			STP maintenance records were sighted by the Auditor.	Complies	

Environment Protection Licence (EPL 1376) Warkworth Mining Ltd								
Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
R 5.7	Heavy Plant Tyre Disposal Report	The licensee must provide the EPA with the Annual Return a Heavy Plant-Tyre Disposal Report. The Report must include: a) plan of the disposed heavy plant waste tyres on the premises for the period that includes: (i) each tyre serial number; (ii) supplier of each tyre; (iii) purchase date of each tyre; (iv) disposal date of each tyre; (v) co-ordinates (easting and northings) of the disposal of each tyre; (vi) the Real Level (RL) in metres AHD of each tyre placed in the pit; (vii) the number of tyres buried in a particular area; and (viii) the cumulative tonnage of tyres disposed of at the premises each year.		Environment and Community Manager – No tyres were disposed of at Warkworth during the audit period.	No evidence of tyre disposal was observed at the Warkworth mine during this IEA.	No tyres were disposed of at Warkworth during the audit period.	Not Triggered	
R 5.8	Water Quality Report	The licensee must provide the EPA with its Annual Return an annual water quality monitoring report prepared by an appropriately qualified and experienced person that includes the following:	Letter from MTW (G Mulhearn) to the EPA titled "Warkworth Mining Limited Environment Protection Licence (EPL 1376) – Annual Return – Annual Ambient Water Quality Monitoring Report", dated 22 January 2021, 17 January 2022 and 23 January 2023. EPA Public Register			The annual water quality monitoring reports were provided to the EPA with the yearly annual returns and contained the information required by Condition R5.8.	Complies	
		a) for the monitoring required by the licence during the reporting period to which the Annual Return relates:					Complies	
		(i) a summary of results for all ambient water quality monitoring required by the licence in table form and graphical form;					Complies	
		(ii) total daily rainfall records from the premises meteorological monitoring required by the licence on the day that the sampling was undertaken in table form;					Complies	
		(iii) total daily continuous rainfall records in graphical form; and					Complies	
		(iv) a plan with the monitoring locations.					Complies	
		(v) A graphical presentation of the trends of monitoring results required by the licence for the reporting period to which the Annual Return relates and the preceding data for the period of record the licensee has monitoring results for the licensed location.					Complies	
		(vi) A graphical representation of total daily continuous rainfall records required by the licence for the record that matches the ambient water quality results, if available.				Complies		
G1.1	Copy of Licence to be kept at the premises	A copy of this licence must be kept at the premises to which the licence applies.	MTW website.			The EPL is available via the MTW website.	Complies	
G1.2	Copy of Licence to be kept at the premises	The licence must be produced to any authorised officer of the EPA who asks to see it.					Noted	
G1.3	Copy of Licence to be kept at the premises	The licence must be available for inspection by any employee or agent of the licensee working at the premises.					Noted	

Environment Protection Licence (EPL 1376) Warkworth Mining Ltd								
Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
G2.1	Completed Programs	Program	Description		Completed Date		Noted	
	Table G2.1	PRP 1 - Salinity Levels	During the next HRSTS discharge the licensee must monitor salinity levels at the nearest downstream irrigation off-take point, to coincide with the peak flow of discharge water. A report must be submitted to the RM within 30 days after sampling.		15-August-2008			
		Coal Mine Particulate Matter Control Best Practice	Requires licensee to conduct a site-specific Best Management Practice (BMP) determination to identify ways to reduce particle emissions		30-July-2012			
		Premises Noise Limits	The licensee is to determine noise limits for the premises in accordance with the INP or otherwise as consistent with the project approval and develop a compliance monitoring program to assess compliance with those limits		08-November-2018			
		Particulate Matter Control Best Practice Implementation – Wheel Generated Dust	Implementation of particulate matter best management practices to address wheel-generated dust.		15-August-2014			
		Particulate Matter Control Best Practice Implementation – Disturbing and Handling Overburden under Adverse Weather Conditions	Implementation of particulate matter best management practices to address the handling of overburden during adverse weather.		15-August-2014			
		Particulate Matter Control Best Practice Implementation - Trial of Best Practice Measures for Disturbing and Handling Overburden	Investigation to establish best practice measures for the handling of overburden.		31-March-2015			
		Coal Mine Wind Erosion of Exposed Land Assessment	Assessment of predicted vs actual exposed lands		31-March-2015			
E1.1	Hunter Salinity Trading Scheme (HRSTS)	This licence authorises the discharge of saline water into the Hunter River Catchment from an authorised discharge point (or points), in accordance with the <i>Protection of the Environment Operations (Hunter River Salinity Trading Scheme) Regulation 2002</i> .				As reported in Section B3, of each Annual Return, no HRTS discharge was undertaken during the audit period	Not Triggered	
E1.2	Hunter Salinity Trading Scheme (HRSTS)	For the purposes of Clauses 23 and 29 of the Protection of the Environment Operations (Hunter River Salinity Trading Scheme) Regulation 2002 the licensee must apply the conversion factor of 0.6.				As reported in Section B3, of each Annual Return, no HRTS discharge was undertaken during the audit period	Not Triggered	
E1.3	Hunter Salinity Trading Scheme (HRSTS)	The licensee must not exceed the hourly volume discharge limit calculated using the following formula, at all discharge point(s) on this licence titled "Discharge of saline water under the Hunter River Salinity Trading Scheme (HRSTS)". H = V / RRT Where: H Is the hourly volume discharge limit (in megalitres per hour); V Is the licence holders volume discharge limit for the block (in megalitres) calculated in accordance with clauses 23 of the Protection of the Environment Operations (Hunter River Salinity Trading Scheme) Regulation (2002); and RRT Is the difference between the discharge stop and start times shown on the river register for that block (in hours).				As reported in Section B3, of each Annual Return, no HRTS discharge was undertaken during the audit period	Not Triggered	

Compliance Register EPL 1976

Mt Thorley Operations

Appendix A4

Environment Protection Licence (EPL 1976) Mt Thorley								
Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
A1.1	What the Licence Authorises and Regulates	This licence authorises the carrying out of scheduled activities listed below at the premises specified in A2. The activities are listed according to their scheduled activity classification, fee-based activity classification and the scale of the operation. Unless otherwise further restricted by condition of this licence, the scale at which the activity is carried out must not exceed the maximum scale specified in this condition.	Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023			Table 4.1 of each Annual Review documents the following tonnages of ROM coal extracted: <ul style="list-style-type: none"> 2020 – 0.88 2021 – 0.43 2022 – 0.13 The recorded tonnages are less than the maximum tonnage prescribed by this condition, therefore compliant.	Complies	
	Table A1.1	Scheduled Activity	Fee Based Activity	Scale				
		Coal Works	Coal Works	>5000000T annual handling				
		Mining for Coal	Mining for Coal	>2000000-3500000 T annual Production				
		What the Licence Authorises and Regulates	Note: In relation to this licence, the licensee must comply with: <ul style="list-style-type: none"> a) The activity scale limits imposed by the licence; 	Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023			Table 4.1 of each Annual Review documents the following tonnages of ROM coal extracted: <ul style="list-style-type: none"> 2020 – 0.88 2021 – 0.43 2022 – 0.13 The recorded tonnages are less than the maximum tonnage prescribed by this condition, therefore compliant.	Complies
	What the Licence Authorises and Regulates	b) The activity scale limits which apply for the reporting period specified in this licence; and	Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023			Table 4.1 of each Annual Review documents the following tonnages of ROM coal extracted: <ul style="list-style-type: none"> 2020 – 0.88 2021 – 0.43 2022 – 0.13 The recorded tonnages are less than the maximum tonnage prescribed by this condition, therefore compliant.	Complies	
		c) The activity scale limits imposed by other legal instruments, such as approvals currently in force under the <i>Environmental Planning and Assessment Act 1979</i> .				Refer to audit schedules for SSD 6465	Complies	
A 2.1	Premises or Plant to Which this Licence Applies	The Licence Applies to the following Premises					Noted	
A2.1	Table A2.1	Premises Details Mt Thorley Operations, Mt Thorley Road, Mt Thorley NSW 2330 Premises defined by plan titled "MTO EPL 1976" dated 29 May 2018 Showing premises boundary EPA ref doc18/346356. The plan is figure 1 of 3 submitted to the EPA on 29 may 2018.						
A 3.1	Other Activities	This licence applies to all other activities carried on at the premises, including					Noted	
A 3.1	Table A3.1	Ancillary Activity Sewage Treatment Systems						

Environment Protection Licence (EPL 1976) Mt Thorley								
Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
A 4.1	Information Supplied to the EPA	Works and activities must be carried out in accordance with the proposal contained in the licence application, except as expressly provided by a condition of this licence. In this condition the reference to "the licence application" includes a reference to: <ul style="list-style-type: none"> a) The applications for any licence (including former pollution control approvals) which this licence replaces under the <i>Protection of the Environment Operations (Savings and Transitional) Regulation 1998</i>; and b) The licence information form provided by the licensee to the EPA to assist the EPA in connection with the issuing of this licence. 					Noted	
P.1.1	Location of Monitoring /Discharge Points and Areas	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.					Noted	
	Table P1.1	EPA identification no.	Type of Monitoring Point	Location Description				
		10	Particulate Matter Monitoring	Monitor "Dragline Crossing" at coordinates 318679 6388113 (Easting Northing) identified as EPA 10 on Figure 2.				
		11	Particulate Matter Monitoring	Monitor "Heavy Vehicle Bridge" at coordinates 320800 6387890 (Easting Northing) identified as EPA 11 on Figure 2				
		13	Particulate Matter Monitoring	Monitor "MTO Boundary" at coordinates 320781 6384921 (Easting Northing) identified as EPA 13 on Figure 2.				
19	Particulate Matter Monitoring	Monitor "MTIE" at co-ordinates 321656, 6388797 (Easting, Northing) identified as EPA 12 on Figure 2.						
P1.2	Location of Monitoring /Discharge Points and Areas	The following utilisation areas referred to in the table below are identified in this licence for the purposes of the monitoring and/ or setting of limits for any application of solids or liquids to the utilisation area.					Noted	
P1.3	Location of Monitoring /Discharge Points and Areas	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					Noted	
	Table P1.3	EPA Identification Number	Type of Monitoring Point	Location Description				
		3	Water quality monitoring	Loders Creek, at CHPP access road bridge at co-ordinates 323505 6386553 (Easting Northing) identified as point 3 on Figure 2.				
		4	Discharge of saline water under the Hunter River Salinity Trading Scheme (HRSTS) Discharge Quality Volume Monitoring	HRSTS discharge at the end of the discharge pipe from Dam 9 at co-ordinates 321960 6385380 (Easting Northing) identified as point 4 on Figure 2				
18	Effluent quality monitoring, Discharge to utilisation area	MTO receiving lagoon (Dam 1S) at co-ordinates 321751 6387626 (Easting Northing) identified as point 18 on Figure 3						
P 1.4	Location of Monitoring / Discharge Points and Areas	The following points referred to in the table below are in this licence for the purposes of weather and/ or noise monitoring and/ or setting limits for the emission of noise from the premises.					Noted	
	Table P1.4	EPA Identification Number	Type of Monitoring Point	Location Description				
		5	Air blast overpressure & ground vibration peak particle velocity monitoring	Blast monitor "Warkworth" at co-ordinates 314311 6394906 (Easting Northing) identified as point 5 on Figure 2.				
		6	Air blast overpressure & ground vibration peak particle velocity monitoring	Blast monitor "Wambo Road" at co-ordinates 313263 6388714 (Easting Northing) identified as point 6 on Figure 2.				
		7	Air blast overpressure & ground vibration peak particle velocity monitoring	Blast Monitor "Bulga Village" at co-ordinates 314252 6385592 (Easting Northing) identified as point 7 on Figure 2.				
		8	Air blast overpressure & ground vibration peak particle velocity monitoring	Blast monitor "Wollemi Peak Road" at co-ordinates 315133 6384578 (Easting Northing) identified as point 8 on Figure 2.				
		9	Air blast overpressure & ground vibration peak particle velocity monitoring	Blast monitor "Putty Road - MTIE" at co-ordinates 322584 6389730 (Easting Northing) identified as point 9 on Figure 2.				
14	Meteorological Station	Meteorological station at co-ordinates 318484 6387405 (Easting Northing) identified as point M4.1 on Figure 2.						
P1.5	Location of Monitoring / Discharge Points and Areas	For the purpose of condition P1.1, P3.1 and P4.1, Figure 2 refers to Plan titled 'MTO EPL 1976' dated 29 May 2018 representing air, blasting, water and meteorological monitoring points EPA Ref DOC18/346356.					Noted	
P1.6	Location of Monitoring / Discharge Points and Areas	For the purpose of condition P1.3, Figure 3 refers to Plan titled 'MTO EPL 1976' dated 29 May 2018 that shows sewage treatment plant infrastructure EPA Ref DOC18/346356.					Noted	

Environment Protection Licence (EPL 1976) Mt Thorley																				
Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations												
P1.7	Location of Monitoring / Discharge Points	The datum for grid references in this licence is the Geodetic Datum of Australia 1994 (GDA94). Zone 56.					Noted													
L1.1	Pollution of Waters	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.	Annual Return (AR) Non-Compliance Detail Licence Number 1976, 01 April 2022 – 31 March 2022 (EPA Website) Annual Return Non-Compliance Detail Licence Number 1976, 01 April 2021 – 31 March 2022 (EPA Website) Annual Return Non-Compliance Detail Licence Number 1976, 01 April 2022 – 31 March 2023 (EPA Website)			The following non-compliances were reported during the Audit Period: <ul style="list-style-type: none"> Dam 1S overtopped as a result of heavy or sustained rainfall which caused significant runoff (2023 AR) Dam 1S overtopped as a result of heavy or sustained rainfall which caused significant runoff (2021 AR) Discharge from 9S via spillway to Loders Creek (2021 AR) 	Non-compliant	A risk assessment and review of the storage capacity of the retention dams be undertaken that takes into account the increasing risk of extreme weather events, including extended duration wet weather patterns.												
L2.1	Concentration Limits	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.	Annual Return (AR) Non-Compliance Detail Licence Number 1976, 01 April 2022 – 31 March 2022 (EPA Website) Annual Return Non-Compliance Detail Licence Number 1976, 01 April 2021 – 31 March 2022 (EPA Website) Annual Return Non-Compliance Detail Licence Number 1976, 01 April 2022 – 31 March 2023 (EPA Website) Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023			One non-compliance was reported during the audit period. During 2021 one Grab Sample at Licensed Discharge and Monitoring Point 4 exceeded the upper 100 percentile limit for pH.	Non-compliant	This single exceedance of the water quality criteria has been investigated. No systemic issues have been identified therefore no further actions are recommended.												
L2.2	Concentration Limits	Where a pH quality limit is specified in the table, the specified percentage of samples must be within the specified ranges.	Annual Return – Mt Thorley Operations Pty Limited Licence 1976 (01-04-2019 to 31-03-2020) Annual Return – Mt Thorley Operations Pty Limited Licence 1976 (01-04-2020 to 31-03-2021) Annual Return – Mt Thorley Operations Pty Limited Licence 1976 (01-04-2021 to 31-03-2022)			One non-compliance was reported during the audit period. During 2021 one Grab Sample at Licensed Discharge and Monitoring Point 4 exceeded the upper 100 percentile limit for pH.	Non-compliant	This single exceedance of the water quality criteria has been investigated. No systemic issues have been identified therefore no further actions are recommended.												
L2.3	Concentration Limits	To avoid any doubt, this condition does not authorise the pollution of waters by any pollutant other than those specified in the table/s.					Noted													
L2.4	Concentration Limits	Water and/ or Land Concentration Limits.					Noted													
L 2.4	Table L2.4	<table border="1"> <thead> <tr> <th colspan="3">Point 4</th> </tr> <tr> <th>Pollutant</th> <th>Units of Measure</th> <th>100 percentile concentration limit</th> </tr> </thead> <tbody> <tr> <td>pH</td> <td>pH</td> <td>6.5-9.5</td> </tr> <tr> <td>TSS</td> <td>Milligrams per litre</td> <td>120</td> </tr> </tbody> </table>	Point 4			Pollutant	Units of Measure	100 percentile concentration limit	pH	pH	6.5-9.5	TSS	Milligrams per litre	120						
Point 4																				
Pollutant	Units of Measure	100 percentile concentration limit																		
pH	pH	6.5-9.5																		
TSS	Milligrams per litre	120																		

Environment Protection Licence (EPL 1976) Mt Thorley								
Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
L3.1	Volume and Mass Limits	For each discharge point or utilisation area specified below (by a point number), the volume/ mass of: a) Liquids discharged to water; or	Annual Return – Mt Thorley Operations Pty Limited Licence 1976 (01-04-2019 to 31-03-2020) Annual Return – Mt Thorley Operations Pty Limited Licence 1976 (01-04-2020 to 31-03-2021) Annual Return – Mt Thorley Operations Pty Limited Licence 1976 (01-04-2021 to 31-03-2022)			The volumes of water discharged from point 4 as reported in the Annual Return documents (B2: Volume of Mass Monitoring Summary) are as follows: - 2021 – 43.1 ML/d (mean) 75.2 ML/d (Max) - 2022 - 40.6 ML/d (mean) 77.1 ML/d (Max) - 2023 - 45.3 ML/d (mean) 76.8 ML/d (Max)	Complies	
L3.1	Volume and Mass Limits	b) Solids or liquids applied to the area; must not exceed the volume/ mass limit specified for that discharge point or area.	Annual Return – Mt Thorley Operations Pty Limited Licence 1976 (01-04-2019 to 31-03-2020) Annual Return – Mt Thorley Operations Pty Limited Licence 1976 (01-04-2020 to 31-03-2021) Annual Return – Mt Thorley Operations Pty Limited Licence 1976 (01-04-2021 to 31-03-2022)			The volumes of water discharged from point 4 as reported in the Annual Return documents (B2: Volume of Mass Monitoring Summary) are as follows: - 2021 – 43.1 ML/d (mean) 75.2 ML/d (Max) - 2022 - 40.6 ML/d (mean) 77.1 ML/d (Max) - 2023 - 45.3 ML/d (mean) 76.8 ML/d (Max)	Complies	
L3.1	Table L3.1	Point 4	Unit of Measure Megalitres per day	Volume /Mass Limit 100				
L4.1	Waste	The licensee must not cause, permit or allow any waste to be received at the premises unless specified in the licence.		Environment and Community Manager – no wastes are accepted from other sites.	No evidence of wastes imported from off-site were observed.	No unapproved waste wastes were received at the Premises during the audit period.	Complies	
L4.2	Waste	The Licensee is authorized to receive mine water from Warkworth Mine, Bulga Mine, Hunter Valley Operations Mine and Redbank Power Station for storage and use in activities authorized by this licence.					Noted	
L4.3	Waste	The Licensee is authorised to transfer mine water to Warkworth, Bulga Mine, Hunter Valley Operations Mine and Redbank Power Station.					Noted	
L5.1	Blasting	Blasting in or on the premises must only be carried out between 0700 hours and 1800 hours, Monday to Saturday. Blasting on the premises must not take place on Sundays or Public Holidays without prior approval of the EPA.	Blasting Records – 2020 Blasting Records – 2021 Blasting Records – 2022 Blasting Records – 2023	Environment and Community Manager – all blasts occurred within permitted times		The detailed records show the time and dates for each blast. Samples of the blasting data confirms compliance.	Complies	
L5.2	Blasting	The airblast overpressure level from blasting operations in or on the premises must not exceed;115 dB (Lin Peak) at any time; at either monitoring point 5,6,7,8, or 9 in Condition P1.4.	Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023			Annual Review documents reported the following relating to blasting. • 2020 – no non compliances identified • 2021 - no non compliances identified • 2022 – no non compliances identified	Complies	
L5.3	Blasting	The airblast overpressure level from blasting operations in or on the premises must not exceed: 120 dB (Lin Peak) at any time; at either monitoring point 5, 6, 7, 8, and 9 in Condition P1.4.	Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023			Annual Review documents reported the following relating to blasting. • 2020 – no non compliances identified • 2021 - no non compliances identified • 2022 – no non compliances identified	Complies	
L5.4	Blasting	The ground vibration peak particle velocity from blasting operations carried out in or on the premises must not exceed; • 5mm/ second for more than 5% of the total number of blasts during each reporting period; At either monitoring point 5, 6, 7, 8, or 9 in Condition P1.4	Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023			Annual Review documents reported the following relating to blasting. • 2020 – no non compliances identified • 2021 - no non compliances identified • 2022 – no non compliances identified	Complies	

Environment Protection Licence (EPL 1976) Mt Thorley

Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
L5.5	Blasting	The ground vibration peak particle velocity from blasting operations carried out in or on the premises must not exceed: 10mm/ second at any time; a) At either monitoring point 5, 6, 7, 8, or 9 in Condition P1.4	Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023			Annual Review documents reported the following relating to blasting <ul style="list-style-type: none"> 2020 – no non compliances identified 2021 - no non compliances identified 2022 – no non compliances identified 	Complies	

L5.6	Blasting	Offensive blast fume must not be emitted from the premises. <i>Definition: Offensive blast fume means post-blast gases from the detonation of explosives at the premises that by reason of their nature, duration, character or quality, or the time at which they are emitted, or any other circumstances;</i> 1. Are harmful to (or likely to be harmful) a person that is outside the premises from which it is emitted, or 2. Interferes unreasonably with (or is likely to interfere unreasonably with) the comfort or repose of a person who is outside the premises from which it is emitted.	Complaints Register Incident Register			There were no incidents reported during the audit period relating to offensive blast fume. Ten blasts were undertaken at Mt Thorley during the audit period in 2020. No blasts were undertaken during 2021, 2022 or 2023.	Complies	
O 1.1	Activities to be carried out in a competent manner	Licensed activities must be carried out in a competent manner. This includes: a) The processing, handling, movement and storage of materials and substances used to carry out the activity; and			Activities on site were observed to be undertaken in a competent manner effective management controls, supervision and management systems implemented to ensure compliance	Activities on site were observed to be undertaken in a competent manner effective management controls, supervision and management systems implemented to ensure compliance	Complies	
		b) The treatment, storage, processing, reprocessing, transport and disposal of waste generated by the activity.			All waste management facilities observed on site were appropriate to the scale and nature of the operations (Refer to Photograph 10).	All waste activities observed on site were appropriate to the scale and nature of the operations	Complies	
O2.1	Maintenance of Plant and Equipment	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	Plant and Equipment maintenance records.	Maintenance Manager demonstrated the operation of the mine Maintenance Management System. The system provides a framework for the management of routine maintenance and the identification and rectification of plant and equipment issues.	Designated equipment maintenance areas were inspected. Complex management systems and equipment are implemented to plan and record routine servicing and unplanned maintenance for items of plant, including coal trucks, drill rigs etc. Photograph 11 shows the heavy plant maintenance facility at Mt Thorley.	Designated equipment maintenance areas were inspected. Complex management systems and equipment are implemented to plan and record routine servicing and unplanned maintenance for items of plant, including coal trucks, drill rigs etc. The maintenance management system implemented at the mine are designed to ensure the efficient operation of plant and equipment were comprehensive	Complies	
		b) Must be operated in a proper and efficient manner.			Equipment observed during the site audit was observed to be operating in a proper and efficient manner. A Systems implemented to ensure the efficient operation of plant and equipment were comprehensive	Equipment observed during the site audit was observed to be operating in a proper and efficient manner.	Complies	

Environment Protection Licence (EPL 1976) Mt Thorley									
Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations	
O2.2	Maintenance of Plant and Equipment	The sewage treatment system must be serviced by a suitably qualified and experienced wastewater technician at least once in each quarterly period and a minimum of four times per year.	Quarterly maintenance records			Quarterly maintenance records were sighted covering the audit period.	Complies		
O2.3	Maintenance of Plant and Equipment	The licensee must record each inspection and any actions required or recommended by the technician including all results of tests performed on the sewage treatment system by the technician as required in Condition O2.2.	Quarterly maintenance records			Quarterly sewage plant maintenance records were sighted and found to comply with this condition.	Complies		
O2.4	Maintenance of Plant and Equipment Maintenance of Plant and Equipment	The licensee must prepare a sewage treatment system maintenance program. The program must include; Provide written records of each quarterly inspection.	Quarterly maintenance records			Quarterly sewage plant maintenance records were sighted and found to comply with this condition.	Complies		
		a) Date, time and results of all routine maintenance procedures undertaken to the sewage treatment system; and							
		b) Certification from a technician that the sewage system is operating at its capacity	Quarterly maintenance records			Quarterly sewage plant maintenance records were sighted and found to comply with this condition.	Complies		
		c) The sewage treatment system must be serviced by a suitably qualified and experienced wastewater technician at least once in each quarterly period and a minimum of four times per year.	Quarterly maintenance records			Quarterly sewage plant maintenance records were sighted and found to comply with this condition.	Complies		
O3.1	Dust	The premises must be maintained in a condition which minimizes or prevents the emission of dust from the premises.	Air Quality Management Plan, Mt Thorley Warkworth, Rev 4.1 dated 28 July 2022 Mt Thorley, Warkworth 2020 Annual Review, 29 April 2021 Mt Thorley, Warkworth 2021 Annual Review, 2 September 2022 Mt Thorley, Warkworth 2022 Annual Review, 1 May 2023			During the site inspection, the Auditor observed water carts in operation. The auditor noted that minor dust was being generated within the operating open cut and on haul roads, and in areas that were being stripped in preparation for mining, although not evidence that visual dust was leaving the site at the time of the site inspection. Significant areas of the site have been cleared and progressive rehabilitation works are behind schedule. The Auditor also observed significant areas, that while not ready for final rehabilitation, would benefit from temporary stabilisation to help reduce dust emissions during adverse wind conditions.	Fifty-eight dust-related complaints were received during the audit period. Significant areas of the site have been cleared and progressive rehabilitation works are behind schedule. The Auditor also observed areas, that while not ready for final rehabilitation, would benefit from temporary stabilisation to help reduce dust emissions during adverse wind conditions. While no exceedances in dust criteria were reported during the audit period, the number of dust related complaints and the Auditor's observations relating to rehabilitation and stabilisation indicate that nuisance dust emissions are being generated by the mine.	Non-compliant	Increase the rate of progressive rehabilitation works with the objective of meeting the established progressive rehabilitation targets. Prepare and implement a program for the stabilisation of unsealed / disturbed areas of the site including stockpiles, finished landforms, and disturbed areas that are not currently being actively worked / filled). The program should identify and classify all areas of the site that are currently disturbed according to the dust generation potential of those areas and establish clear targets for the stabilisation of those areas (either permanent or temporary) with the objective of meeting the requirements of the Blue Book.

Environment Protection Licence (EPL 1976) Mt Thorley								
Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
O3.2	Dust	All trafficable areas, coal storage and vehicle manoeuvring areas in or on the premises must be maintained, at all times, in a condition that will minimise the generation, or emission from the premises, of wind-blown or traffic generated dust.			Trafficable areas are well delineated. Water carts were in operation at the time of the IEA site inspection.	As observed during the audit inspection. Guide-posts have been installed to define trafficable areas and restrict vehicle movements to those areas. Water carts were in operation at the time of this audit.	Complies	
O3.3	Dust	All operations and activities occurring at the premises must be carried out in a manner that will minimise the emission of dust from the premises.	Air Quality Management Plan, Mt Thorley Warkworth, Rev 4.1 dated 28 July 2022		The operations observed during the site audit were being managed appropriately to minimise dust generation.	As observed during the audit inspection all operational areas of the site were managed appropriately to minimise the generation of dust. Water carts are deployed to wet down internal roads and minimise dust generation. It was noted however that the site contains significant areas that have been disturbed and that progressive rehabilitation works are behind schedule).	Complies	
O4.1	Effluent application to land	Application of wastewaters must only be applied at a rate that can be assimilated by the effluent discharge utilisation area and its evapotranspiration capacity.		Environment and Community Manager - At MTO treated effluent is discharged to Point 18 - Dam 1S. No evapotranspiration area.		Effluent is discharged to Point 18 - Dam 1S. No evapotranspiration area.	Not Triggered	
O4.2	Effluent application to land	The license must ensure that the effluent discharge utilisation area perimeter is fenced and signposted "Effluent Re-Use Area Keep Out" and controlled in a manner to ensure exclusion of persons from that area.		Environment and Community Manager - Dam 1S is the only effluent discharge utilisation area on EPL1976. Dam 1S is located within the mining operations area of Mount Thorley Operations. Dam 1S and is accessed for sampling and mine water management pump operations. Signs shown in RFI-03 folder for this condition.	Dam 1S – the dam is signposted as an effluent reuse area (Photograph 12).	Effluent is approved for dust suppression at Mt Thorley. The site is secure from public access and Dam S1 is appropriately signposted.	Complies	
O5.1	Emergency Response	The licensee must maintain, and implement as necessary, a current Pollution Incident Response Management Plan (PIRMP) for the premises. The licensee must always keep the incident response plan on the premises. The incident response plan must document systems and procedures to deal with all types of incidents (e.g. spills, explosions or 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. The licensee must develop a Pollution Incident Response Management Plan in accordance with the requirements in Part 5.7A of the Protection of the Environment Operations (POEO) Act 1997 and POEO regulations.	Pollution Incident Response Management Plan – Mount Thorley Warkworth, revision 10 dated 1 October 2019. EPA Website – Summary Licence 1976			The PIRMP is placed on the MTW website and includes the following information: <ul style="list-style-type: none"> Regulatory requirements and duty to notify Environmental hazards and pollution inventory Key contact details Notification procedure (internal and external) Emergency Contact details Training, testing, reviewing and communicating the plan The EPA website notes the latest test of the PIRMP was undertaken on the 4 th of November 2022. The next testing for the PIRMP is on the 4 th of November 2023	Complies	Update the PIRMP Testing Summary (Page 3) to include the test undertaken between 2019 and November 2022.
O6.1	Other Operating Conditions	There must be no incineration or open burning of any material(s) on the premises, except as specifically authorized by the EPA.			No evidence of incineration or burning of waste materials was observed during the site inspection.	There was no incineration or open burning of any materials on the premises observed during the audit inspection, or reported during the audit period	Complies	

Environment Protection Licence (EPL 1976) Mt Thorley								
Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
O6.2	Other Operating Conditions	All above ground tanks containing material that is likely to cause environmental harm must be banded or have an alternative spill containment system in place.			Above ground tanks used for fuels and oils were observed to have appropriate bunding and spill control systems in place.	Above ground tanks used for fuel and other liquids were observed to have appropriate bunding and spill control systems in place.	Complies	
M1.1	Monitoring Records	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.					Noted	
M1.2	Monitoring Records	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;	Monthly Environmental Monitoring Reports (MTW Website) Monthly Environmental Monitoring Reports (MTW Website)			All records reviewed during the audit were in a legible form. Monitoring records from 2017 were sighted on the MTW website.	Complies	
		b) Kept for at least 4 years after the monitoring or event to which they relate took place; and					Noted	
		c) Produced in a legible form to any authorized officer of the EPA who asks to see them	Monthly Environmental Monitoring Reports (MTW Website)			All records reviewed during the audit were in a legible form.	Complies	
M1.3	Monitoring Results	The following records must be kept in respect of any samples required to be collected for the purposes of this licence; a) The date(s) on which the sample was taken;	MTW surface water sampling and testing records			Surface water and effluent sampling and testing records were sighted including monthly consultant reports from AECOM. The records include description of the approved AS methods, COC, and lab results. This includes this information required by M1.3 being sample dates, times, point and sampler's name.	Complies	
		b) the time(s) at which the sample was collected;					Complies	
		c) The point at which the sample was taken; and					Complies	
		d) The name of the person who collected the sample					Complies	
M2.1	Requirement to monitor concentration of pollutants discharged	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.	Annual Return (AR) Non-Compliance Detail Licence Number 1976, 01 April 2022 – 31 March 2022 (EPA Website) Annual Return Non-Compliance Detail Licence Number 1976, 01 April 2021 – 31 March 2022 (EPA Website) Annual Return Non-Compliance Detail Licence Number 1976, 01 April 2022 – 31 March 2023 (EPA Website)			During 2021, 2022 and 2023 Table M2.2 requires continuous PM10 monitoring for EPA air monitoring points 10,11,13 and 19. Monitoring data capture was >98% but not continuous during the reporting period. During 2021, 2022 and 2023 Table M2.3 requires continuous monitoring for pH at Point 4 during Discharge Monitoring data capture was >99% but not continuous during the reporting period. During 2021, 2022 and 2023 Table M2.3 requires continuous monitoring for conductivity at Point 4 during Discharge Monitoring data capture was >99% but not continuous during the reporting period.	Non-compliant	Ensure that all continuous monitoring equipment is operational and well maintained.

Environment Protection Licence (EPL 1976) Mt Thorley								
Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
M2.2	Monitoring	Air Monitoring Requirements:						
	Table M2.2	Point 10,11,13,19						
		Pollutant	Units of Measure	Frequency	Sampling method			
		PM10	Micrograms per cubic metre	continuous	Special Method 1			
		Note: Special Method 1 requires the Licensee to undertake the monitoring of PM10 concentration in strict accordance with the manufacturer's operating manual supplied with the continuous monitoring equipment and titled "Model 8530/85318532 Dust Track™ II Aerosol Monitor Operation and Service Manual (P/N 6001893, Revision A, September 2008", or any updated version as published by the manufacturer						
M 2.3	Monitoring	Water and/or Land Monitoring Requirements						
	Table M2.3	Pollutant	Units of Measure	Frequency	Sampling method			
		Point 3						
		Conductivity	micro siemens per centimetre	Once a month	Grab sample			
		pH	pH	Once a month	Grab sample			
		Total Suspended Solids	milligrams per litre	Once a month	Grab sample			
		Point 4						
		Conductivity	micro siemens per centimetre	Continuous during discharge	A probe designed to measure the range 0 to 10,000 uS/cm			
		pH	pH	Daily during any discharge	Grab sample			
		Total Suspended Solids	milligrams per litre	Daily during any discharge	Grab sample			
Point 18								
Faecal Coliforms	colony forming units per 100 millilitres	Quarterly	Grab sample					
pH	pH	Quarterly	Grab sample					
M 3.1	Testing Methods – Concentration Limits	Monitoring for the concentration of a pollutant emitted to the air required to be conducted by this licence must be done in accordance with: <ul style="list-style-type: none"> 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. 	Air Emission Testing Records covering the audit period.	Environment and Community Manager - Monitoring is done in accordance with Special Method 1 - manufacturers operating manual for the Dustraks. The manufacturers operating manual, evidence of an annual calibration certificate, maintenance register are maintained by MTW.		Air quality monitoring is undertaken by approved methods.	Complies	
M3.2	Testing Methods – Concentration Limits	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 unless another method has been approved by the EPA in writing before any tests are conducted.	Water Testing Records covering the audit period.			Water testing is undertaken by approved methods.	Complies	
M3.3	Testing Methods – Concentration Limits	Sampling, storage and analysis of electrical conductivity by grab sample is permitted to be undertaken in accordance with AECOM Australia Method; Conductivity by classical using APHA 2510 B (EPA approval DOC18/17513-08).					Noted	
M3.4	Testing Methods – Concentration Limits	Sampling, storage and analysis of pH by grab sample is permitted to be undertaken in accordance with AECOM Australia Method; pH by classical using APHA 4500 H+B (EPA Approval DOC18/17513-08).					Noted	
M4.1	Weather Monitoring	The licence must collect and analyse meteorological data on the premises for each weather 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	Annual Return (AR) Non-Compliance Detail Licence Number 1976, 01 April 2022 – 31 March 2022 (EPA Website) Annual Return Non-Compliance Detail Licence Number 1976, 01 April 2021 – 31 March 2022 (EPA Website) Annual Return Non-Compliance Detail Licence Number 1976, 01			As reported in the 2021, 2022 and 2023 Annual Returns, M4.1 requires continuous monitoring for Charlton Ridge Meteorological Station. Monitoring Data Capture was not continuous during the reporting period.	Non-compliant	Ensure that all continuous monitoring equipment is operational and well maintained.

Environment Protection Licence (EPL 1976) Mt Thorley									
Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations	
			April 2022 – 31 March 2023 (EPA Website)						
	Table M4.1	Meteorological Monitoring							
		Parameter	Units of Measure	Frequency	Sampling Method				
		Air Temperature	0C	Continuous	Thermometer				
		Wind direction		Continuous	AM-2 & AM-4 (see note 1)				
		Wind Velocity	mm/sec	Continuous	AM-2 & AM-4 (see note 1)				
		Rainfall	mm	Daily	Rain gauge				
		Note: 1: Methods AM-2 & AM-4 are specified in the Approved Methods for the Sampling and Analysis of Air Pollutants in NSW and all monitoring must be conducted strictly in accordance with the requirements outlined in this document.							
M5.1	Recording of Pollution Complaints	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.	MTW Complaints Register			A legible record of complaints is kept	Complies		
M5.2	Recording of Pollution Complaints	The record must include details of the following:	Complaints Register			The date and time of complaints are recorded on the MTW complaints register	Complies		
		a) The date and time of the complaint;	Complaints Register			The Complaints Register includes the details of how the complaint was made.	Complies		
		b) The method by which the complaint was made;	Complaints Register			The name of the complainant is recorded on the MTW complaints register	Complies		
		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	Complaints Register			The name of the complainant is recorded on the MTW complaints register	Complies		
		d) The nature of the complaint;	Complaints Register			The complaints register includes the details of the immediate actions taken	Complies		
		e) The action taken by the licensee in relation to the complaint, including any follow-up contact with the complainant; and	Complaints Register			The Complaints Register includes, when appropriate, details of why no action was taken.	Complies		
	f) If no action was taken by the licensee, the reasons why no action was taken.	Complaints Register							
M5.3	Recording of Pollution Complaints	The record of a complaint must be kept for at least 4 years after the complaint was made.	Complaints Register Website Complaints Summary			Details of complaints are kept for at least 4 years.	Complies		
M5.4	Recording of Pollution Complaints	The record must be produced to any authorised officer of the EPA who asks to see them.					Noted		
M6.1	Telephone complaints line	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.	Contact Us - MOUNT THORLEY WARKWORTH COAL OPERATIONS LIMITED (mtwcoal.com.au)			The MTW website provides the details of a community complaints hotline which is available 24 hours a day.	Complies		
M6.2	Telephone complaints line	The licensee must notify the public of the complaints like telephone number and the fact that it is a complaints line so that the impacted community knows how to make a complaint.	Contact Us - MOUNT THORLEY WARKWORTH COAL OPERATIONS LIMITED (mtwcoal.com.au)			The website clearly notes that the contact telephone number is a complaints line so there is no confusion.	Complies		
M6.3	Telephone complaints line	The preceding two conditions do not apply until 3 months after: the date of the issue of this licence.					Noted		
M7.1	Requirement to monitor volume or mass	For each discharge point or utilisation area specified below, the licensee must monitor; The volume of liquids discharged to water or applied to the area;	Annual Return (AR) Non-Compliance Detail Licence Number 1976, 01 April 2022 – 31 March 2022 (EPA Website)			Table M7.1 requires continuous monitoring for volumetric flow at Point 4 during discharge. During 2021 monitoring data capture was not continuous during the reporting period.	Non-compliant	Ensure that all continuous monitoring equipment is operational and well maintained.	
		a) The mass of solids applied to the area;	Annual Return Non-Compliance Detail Licence Number 1976, 01 April 2021 – 31 March 2022 (EPA Website)						
		b) The mass of pollutants emitted to the air;	Annual Return Non-Compliance Detail Licence Number 1976, 01 April 2022 – 31 March 2023						
		c) At the frequency and using the method and units of measure, specified below.							

Environment Protection Licence (EPL 1976) Mt Thorley								
Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
M7.1	Table M7.1	Point 4						
		Frequency	Unit of Measure	Sampling Method				
		Continuous during discharge	megalitres per day	Ultrasonic flow meter				
M8.1	Blasting	To determine compliance with conditions L4.2, L4.3, L4.4 and L4.5; a) air blast overpressure and ground vibration levels must be measured and electronically recorded for monitoring points 5, 6, 7, 8, and 9 for the parameters specified in Column 1 of the table below; and	Blasting Records – 2020 Blasting Records – 2021 Blasting Records – 2022 Blasting Records – 2023			Blast monitoring was undertaken at the prescribed locations throughout the audit period.	Complies	
		b) The licensee must use the units of measure, sampling method, and sample at the frequency specified opposite in the other columns.	Blasting Records – 2020 Blasting Records – 2021 Blasting Records – 2022 Blasting Records – 2023			Blast monitoring results are recorded using the units as specified in this condition.	Complies	
	Table M8.1							
		Parameter	Units of Measure	Frequency	Sampling Method			
		Airblast Overpressure	Decibels (Linear Peak)	All Blasts	Australian Standard AS 2187.2-2006			
		Ground Vibration Peak Particle Velocity	millimetres/second	All Blasts				
M9.1	HRSTS Monitoring	HRSTS Monitoring – The licensee must continuously operate and maintain communication equipment which makes the conductivity and flow measurements, taken at Point 4 available to the “Service Coordinator” within one hour of those measurements being taken and makes them available in the format specified in the “Hunter River Salinity Trading Scheme Discharge Point Telemetry Specification – Rev V1.0 released 4 October 2018” as published by Water NSW.		Environment and Community Manager - Maintenance of the system is subject to a maintenance contract with Benchmark Monitoring. The WML system has not been used in the audit period, however it is maintained with sensors and comms to the Water NSW telemetry system.		The WML system has not been used in the audit period, however it continues to be maintained	Complies	
M9.2	HRSTS Monitoring	The licensee must ensure that all monitoring data is within a margin of error of 5% for conductivity measurements and 10% for discharge flow measurement.	https://hydrotel.watnsw.com.au/hrsts.html			Monitoring data is provided to Water NSW and is available via their website.	Complies	
M9.3	HRSTS Monitoring	The licence must mark monitoring point(s) 4, with a sign which clearly indicates the name of the licensee, whether the monitoring point is up or down stream of the discharge point(s) and that it is a monitoring point for the Hunter River Salinity Trading Scheme.			Signage was observed in the field with the required information	The signage with the required information was observed during the site inspection at the point of discharge	Complies	
M9.4	Requirement to Monitor Particulate Matter	– The Licensee must record the average PM10 concentration at Monitoring Points 10, 11, 12 and 13 at intervals of 10 minutes. This data must be made available upon request by any Authorised Officer of the EPA who asks to see them.	Annual Return – Mt Thorley Operations Pty Limited Licence 1976 (01-04-2019 to 31-03-2020) Annual Return – Mt Thorley Operations Pty Limited Licence 1976 (01-04-2020 to 31-03-2021) Annual Return – Mt Thorley Operations Pty Limited Licence 1976 (01-04-2021 to 31-03-2022)			Section B2 of each Annual Return document provides a summary of PM 10 monitoring from Points 10,11, 13 and 19. Table P1.1 specifies which monitoring locations are required for monitoring PM ₁₀ levels. That table specifies points 10,11,13 and 19. This condition (M9.4) specifies points 10,11,12 and 13. The Auditor believes that this is a typographical error and that the monitoring points specified in Condition P1.1 are correct.	Complies	Consult with the EPA and seek an amendment to EPL 1976 to remove the typographical error in Condition M9.4.

Environment Protection Licence (EPL 1976) Mt Thorley								
Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
R1.1	Reporting Condition	The licensee must complete and supply to the EPA an Annual Return in the approved form comprising;	Annual Return – Mt Thorley Operations Pty Limited Licence 1976 (01-04-2019 to 31-03-2020) Annual Return – Mt Thorley Operations Pty Limited Licence 1976 (01-04-2020 to 31-03-2021) Annual Return – Mt Thorley Operations Pty Limited Licence 1976 (01-04-2021 to 31-03-2022)			Annual Returns were provided to the EPA for each year within the reporting period in the standard EPA form	Complies	
		1. A Statement of Compliance				Section A of each Annual Return includes a Statement of Compliance	Complies	
		2. A Monitoring and Complaints Summary				Section B of each Annual Return includes a monitoring and complaints summary	Complies	
		3. A Statement of Compliance – Licence Conditions				Section C of each Annual Return includes a statement of compliance with License conditions	Complies	
		4. A Statement of Compliance – Load based Fee				Section D of each Annual Return includes a statement of compliance – Load based fee calculation	Complies	
		5. A Statement of Compliance – Requirement to Prepare Pollution Incident Response Management Plan				Section E of each Annual Return includes a statement of compliance Requirement to prepare a PIRMP	Complies	
		6. A Statement of Compliance – Requirement to Publish Pollution Monitoring Data and				Section F of each Annual Return includes a statement of compliance – Requirement to Publish Pollution Monitoring data	Complies	
		7. A Statement of Compliance - Environmental Management Systems and Practices				Section G of each Annual Return includes a statement of compliance – Requirement to Publish Pollution Monitoring data	Complies	
		At the end of each reporting period, the EPA will provide to the licensee notification that the Annual Return is due.						Noted
R1.2	Reporting Condition	The Annual Return must be prepared in respect of each reporting period, except as provided below. Note: The term “reporting period” is defined in the dictionary at the end of this licence. Do not complete the Annual Return until after the end of the reporting period.					Noted	
R1.3	Reporting Condition	Where this licence is transferred from the licensee to a new licensee; a) The transferring licensee must prepare an Annual Return for the period commencing on the first day of the reporting period and ending on the date the application for the transfer of the licence to the new licensee is granted; and				EPL not transferred during the audit period	Noted	
		b) The new licensee must prepare an Annual Return for the period commencing on the date the applicant for the transfer of the licence is granted and ending on the last day of the reporting period. Note: An application to transfer a licence must be made in the approved form for this purpose.				EPL not transferred during the audit period	Noted	
R1.4	Reporting Condition	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;				The EPL won't be surrendered until after the operations are ceased	Noted	
		a) In relation to the surrender of a licence – the date when notice in writing of approval of the surrender is given; or					Noted	
		b) In relation to the revocation of the licence – the date from which notice revoking the licence operates.					Noted	

Environment Protection Licence (EPL 1976) Mt Thorley								
Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
R1.5	Reporting Condition	The Annual Return for the reporting period must be supplied to the EPA via eConnect EPA or by registered post no 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).	Annual Return Submission details Licence Number 1976 (EPA Website)			The end date for each annual Return is 31 March 2021, 2022, and 2023 respectively. Submission dates for each annual return were as follows: <ul style="list-style-type: none"> 2022 – 26 May 2023 2021 – 27 May 2022 2020 – 28 May 2021 All annual Returns for the reporting period were therefore submitted within the timeframes as required by this condition	Complies	
R1.6	Reporting Condition	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.					Noted	
R1.7	Reporting Condition	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				The EPL Annual Returns were signed by Directors	Complies	
		b) By a person approved in writing by the EPA to sign on behalf of the licence holder				The EPL Annual Returns were signed by Directors	Complies	
R2.1	Notification of Environmental Harm	Notifications must be made by telephoning the Environmental Line service on 131 555.				There are several examples where incidents have occurred with the potential to cause environmental harm to have been notified the EPA. These include (but are not limited to): <ul style="list-style-type: none"> Water release from dam 9s Spillway (14 May 2020) Water from equipment park area (4 January 2021) The auditee has maintained records of notifications to the EPA as well as activation of the PIRMP	Complies	
R2.2	Notification of Environmental Harm	The licensee must provide written details of the notification to the EPA within 7 days of the date on which they became aware of the incident.	Reportable Incident Correspondence			There have been four incidents reported to EPA during the audit period. Records demonstrate EPA were provided with details of the incident within 7 days of the date they were aware of the incident and in most cases on the same day. In some instances, EPA requested a written report in accordance with R 3.1	Complies	
R2.2	Notification of Environmental Harm	Note: The licensee or its employees must notify all relevant authorities of incidents causing or threatening material harm to the environment immediately after the person becomes aware of the incident in accordance with the requirements of Part 5.7 of the Act.	Reportable Incident Correspondence			There are several instances where overtopping of sediment basins has resulted in the activation of the pollution incident response and the notification of relevant authorities.	Complies	
R3.1	Written Report	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	Reportable Incident Correspondence			There have been several incidents relating to the premises where an EPA officer has requested a written report	Noted	
		b) Where this licence applies to vehicles or mobile to the environment (whether the harm occurs on or off the premises to which the licence applies), the authorised officer may request a written report of the event.	Reportable Incident Correspondence			There have been no incidents during the reporting period that have been reported relating to vehicles	Noted	

Environment Protection Licence (EPL 1976) Mt Thorley								
Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
R3.2	Written Report	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.				Reports have been submitted to EPA in accordance with agreed timeframes. In some instances, extensions to timeframes have been sought and agreed with EPA	Complies	
R3.3	Written Report	The request may require a report which includes any or all of the following information:	Letter from Yancoal (G.Mulhearn) to EPA (M Hartwell) titled "Report Ref:Co7612-2020 – Dam 9S Overtopping event, Mount Thorley Operations Pty Ltd			Incident reports have been prepared and submitted to EPA that includes the information as follows:	Complies	
R3.3	Written Report	a) The cause, time and duration of the event;	Letter from Yancoal (G.Mulhearn) to EPA (M Hartwell) titled "Report Ref:Co7612-2020 – Dam 9S Overtopping event, Mount Thorley Operations Pty Ltd			Section 1 a) – Incident Details	Complies	
		b) The type, volume and concentration of every pollutant discharged as a result of the event;	Letter from Yancoal (G.Mulhearn) to EPA (M Hartwell) titled "Report Ref:Co7612-2020 – Dam 9S Overtopping event, Mount Thorley Operations Pty Ltd			Section 1 c) – estimated quantity or volume of any pollutants and the concentration of any pollutants involved	Complies	
		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;	Letter from Yancoal (G.Mulhearn) to EPA (M Hartwell) titled "Report Ref:Co7612-2020 – Dam 9S Overtopping event, Mount Thorley Operations Pty Ltd			EPA correspondence has not requested this information for any of the incidents	Noted	
		d) The name, address and business hours telephone number of every other person (of whom the licence is aware) who witnessed the event, unless the licensee has been unable to obtain the information after making reasonable effort	Letter from Yancoal (G.Mulhearn) to EPA (M Hartwell) titled "Report Ref:Co7612-2020 – Dam 9S Overtopping event, Mount Thorley Operations Pty Ltd			EPA correspondence has not requested this information for any of the incidents	Noted	
		e) Action taken by the licensee in relation to the event, including any follow up contact with any complaints;	Letter from Yancoal (G.Mulhearn) to EPA (M Hartwell) titled "Report Ref:Co7612-2020 – Dam 9S Overtopping event, Mount Thorley Operations Pty Ltd			Section 3 c- provides details of actions planned or proposed	Complies	
		f) Details of any measure taken or proposed to be taken to prevent or mitigate against a recurrence of such an event; and	Letter from Yancoal (G.Mulhearn) to EPA (M Hartwell) titled "Report Ref:Co7612-2020 – Dam 9S Overtopping event, Mount Thorley Operations Pty Ltd			Section 3 c- provides details of actions planned or proposed	Complies	
		g) Any other relevant matters.	Letter from Yancoal (G.Mulhearn) to EPA (M Hartwell) titled "Report Ref:Co7612-2020 – Dam 9S Overtopping event, Mount Thorley Operations Pty Ltd			Provided in report where relevant to the incident	Noted	
R3.4	Written Report	The EPA may make a written report 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.					Noted	
R4.1	Reporting of Exceedance of Blasting Limits	Reporting of Exceedance of Blasting Limits – The licensee must report any exceedance of the licence blasting limits to the regional office of the EPA as soon as practicable after the exceedance becomes known to the licensee or to one of the licensee's employees or agents.	Annual Return (AR) Non-Compliance Detail Licence Number 1976, 01 April 2022 – 31 March 2022 (EPA Website) Annual Return Non-Compliance Detail Licence Number 1976, 01 April 2021 – 31 March 2022 (EPA Website) Annual Return Non-Compliance Detail Licence Number 1976, 01 April 2022 – 31 March 2023 (EPA Website)			As noted in the Annual Return documents, the blasting limits were complied with for the reporting period.	Complies	

Environment Protection Licence (EPL 1976) Mt Thorley								
Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
R4.2	Reporting of Blast Monitoring	Reporting of Blast Monitoring – The results of the blast monitoring required by condition M8.1 must be submitted to the EPA at the end of each reporting period.				The blast monitoring results are included in the Annual Review. Each Annual Review is submitted to EPA (concurrently with the DPE)	Complies	
R4.3	HRSTS Reporting	HRSTS Reporting – The licensee must compile a written report of the activities under the Scheme for each scheme year. The scheme year shall run from 1 July to 30 June each year. The written report must be submitted to the EPA’s regional office within 60 days after the end of each scheme year and be in a form and manner approved by the EPA. The information will be used by the EPA to compile an annual scheme report.	Letter from MTW (G Mulhearn) to the EPA (T Wilson) titled “Mount Thorley Operations HRSTS Report 2019/20”, dated 21 July 2020. Letter from MTW (G Mulhearn) to the EPA (T Wilson) titled “Mount Thorley Operations HRSTS Report 2020/21”, dated 26 August 2021. Letter from MTW (G Mulhearn) to the EPA (T Wilson) titled “Mount Thorley Operations HRSTS Report 2021/22”, dated 29 August 2022.			Annual HRSTS reports were issued to the EPA for each year during the audit period.	Complies	
R4.4	Sewage Treatment Plant Maintenance	Sewage Treatment Plan – The sewage treatment system maintenance program required by Condition O2.4 must be submitted annually to the EPA with the Annual Return.	Letter from MTW (G Mulhearn) to the EPA titled “Mt Thorley Operations Environment Protection Licence (EPL 1976) – Sewage Treatment Plant Maintenance Program Records”, dated 27 May 2020, 24 May 2021, and 18 May 2022.	Environment and Community Manager - The STP maintenance reports are submitted with the maintenance program		The STP Maintenance reports are submitted with the maintenance program	Complies	
R4.5	Sewage Treatment Plant Maintenance	The licensee must retain a copy of each report required by Condition O2.3 for 3 years from the date each record is made.					Noted	
G1.1	Copy of Licence to be kept at the premises or plant	A copy of this licence must be kept at the premises to which the licence applies.	EPL 1976			The EPL was kept on site in printed form in the main site office in an accessible location	Complies	
G1.2	Copy of Licence to be kept at the premises or plant	The licence must be produced to any authorised officer of the EPA who asks to see it.					Noted	
G1.3	Copy of Licence to be kept at the premises or plant	The licence must be available for inspection by any employee or agent of the licensee working at the premises.	EPL 1976				Noted	
G2.1	Completed Programs	Program	Description			Completed Date		
	Table G2.1	The licensee must supply an audit of blast complaints	The licensee must supply an audit of blast complaints received after 12 months of the extension of blasting hours from 1700 to 1800. Trial will ensure that the extension of blasting hours to 6pm has no impact to surrounding environment.			21-December-2005		
		Coal Mine Particulate Matter Control Best Practice	Requires licensee to conduct a site-specific Best Management Practice (BMP) determination to identify ways to reduce particle emissions			30-July-2012		
		Particulate Matter Control Best Practice Implementation – Wheel Generated Dust	Implementation of particulate matter best management practices to address wheel-generated dust.			15-August-2014		
		Particulate Matter Control Best Practice Implementation – Disturbing and Handling Overburden under Adverse Weather Conditions	Implementation of particulate matter best management practices to address the handling of overburden during adverse weather.			15-August-2014		
		Particulate Matter Control Best Practice Implementation - Trial of Best Practice Measures for Disturbing and Handling Overburden	Investigation to establish best practice measures for the handling of overburden.			31-March-2015		
	Coal Mine Wind Erosion of Exposed Land Assessment	Assessment of predicted vs actual exposed lands			31-March-2015			

Environment Protection Licence (EPL 1976) Mt Thorley								
Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
E1.1	Hunter Salinity Trading Scheme (HRSTS)	This licence authorises the discharge of saline water into the Hunter River Catchment from an authorised discharge point (or points), in accordance with the <i>Protection of the Environment Operations (Hunter River Salinity Trading Scheme) Regulation 2002</i> .	Letter from MTW (G Mulhearn) to the EPA (T Wilson) titled "Mount Thorley Operations HRSTS Report 2019/20", dated 21 July 2020. Letter from MTW (G Mulhearn) to the EPA (T Wilson) titled "Mount Thorley Operations HRSTS Report 2020/21", dated 26 August 2021. Letter from MTW (G Mulhearn) to the EPA (T Wilson) titled "Mount Thorley Operations HRSTS Report 2021/22", dated 29 August 2022.	Environment and Community Manager - There were discharges at MTO in 2021 and 2022. These were done in accordance with HRSTS regulation. MTW discharge authorisation checklists which include the conversion factor and are used to do calculation of salt tonnes, total volume and hourly flow rate limits.		Discharges under the HRSTS complied with all water quality criteria during the audit period.	Complies	
E1.2	Hunter Salinity Trading Scheme (HRSTS)	For the purposes of Clauses 23 and 29 of the Protection of the Environment Operations (Hunter River Salinity Trading Scheme) Regulation 2002 the licensee must apply the conversion factor of 0.6.	HRSTS Daily Discharge Checklists (24/3/21, 1/4/21, 4/4/21, 7/12/21, 17/1/22, 5/4/22).	Environment and Community Manager - Discharge calculations used the conversion factor of 0.6. MTW discharge authorisation checklists which include the conversion factor and are used to do calculation of salt tonnes, total volume and hourly flow rate limits.		Discharge calculations used the conversion factor of 0.6.	Complies	
E1.3	Hunter Salinity Trading Scheme (HRSTS)	The licensee must not exceed the hourly volume discharge limit calculated using the following formula, at all discharge point(s) on this licence titled "Discharge of saline water under the Hunter River Salinity Trading Scheme (HRSTS)". H = V/ RRT	Annual Return (AR) Non-Compliance Detail Licence Number 1976, 01 April 2022 – 31 March 2022 (EPA Website) Annual Return Non-Compliance Detail Licence Number 1976, 01 April 2021 – 31 March 2022 (EPA Website) Annual Return Non-Compliance Detail Licence Number 1976, 01 April 2022 – 31 March 2023 (EPA Website)	Environment and Community Manager - This issue was reported to EPA in the 2021 Annual Return. There has been no further correspondence from EPA in relation to this matter. MTW applies sets a conservative hourly flow volume to the maximum permitted HRSTS flow volume to ensure compliance with this licence condition. Subsequent to the incidence this has been further reviewed by our technical control system engineer to confirm it is operating as intended. There were no exceedances of hourly flow rate limit since that incident despite significant use of the discharge on 86 days in the subsequent EPL1976 Annual Return period, which demonstrates the system is working for hourly flow rate.		As reported in the 2021 Annual Return an exceedance of the HRTS hourly volume discharge limit occurred on 20 March 2021. This non-compliance was discovered during the preparation of the 2021 Annual Return. The exceedance event has been reviewed by MTW and the discharge rate modified. No further exceedances have been recorded.	Non-compliant	The single volume exceedance has been investigated and appropriate actions taken to prevent future exceedances. No additional actions have been identified.

Compliance Register

Standard Conditions of Mining Lease Rehabilitation

Appendix A5

Standard Mining Lease Terms (Applies from 2 July 2022)

Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
Conditions 1 to 4 are administrative only								
D1-C4	Protection of the environment and rehabilitation Must prevent or minimise harm to environment	(1) The holder of a mining lease must take all reasonable measures to prevent, or if that is not reasonably practicable, to minimise, harm to the environment caused by activities under the mining lease.	Annual Return (AR) Non-Compliance Detail Licence Number 1976, 01 April 2022 – 31 March 2022 (EPA Website) Annual Return Non-Compliance Detail Licence Number 1976, 01 April 2021 – 31 March 2022 (EPA Website) Annual Return Non-Compliance Detail Licence Number 1976, 01 April 2022 – 31 March 2023 (EPA Website)			During the audit period (2021) non-complying overflows / discharges of water occurred from dams on both the Mt Thorley and Warkworth mines. These pollution events resulted in the issue of Penalty Notices by the EPA and DPE. For further information refer to Section 7.3 and Condition L1.1 on the EPL Compliance Registers above.	Non-compliant	A risk assessment and review of the storage capacity of the retention dams be undertaken that takes into account the increasing risk of extreme weather events, including extended duration wet weather patterns.
		(2) In this clause—harm to the environment has the same meaning as in the <i>Protection of the Environment Operations Act 1997</i> .				Explanatory Clause Only.	Noted	
D1-C5	Protection of the environment and rehabilitation Rehabilitation to occur as soon as reasonably practicable after disturbance	The holder of a mining lease must rehabilitate land and water in the mining area that is disturbed by activities under the mining lease as soon as reasonably practicable after the disturbance occurs.	2020 Annual Review 2021 Annual Review 2022 Annual Review	Environment and Community Manager - MTW has reported to RR and DPE via the Annual Review for 2021 (Section 7.3) and 2022 (Section 7.1) that rehabilitation progress is lagging behind the EIS 2014 rehabilitation projections. The 2022 Annual Review indicated that completed rehabilitation at the end of 2023 is forecast to be 1,368ha which will be 221.8ha (13.8%) less than the EIS forecast detailed in the stage plan for 2023. MTW's view is that rehabilitation is being progressed on areas as soon as possible and that the deficit with the EIS rehab progress just represents a difference in when the EIS projected areas to be available for rehabilitation. MTW has not been subject to any compliance action related to rehabilitation progression, from either RR or DPE.		This condition is considered to be non-compliant as the predicted/forecast target for 2020 was not met and it is predicted that the forecast for 2023 will not be met. It is acknowledged that several factors, including weather conditions, have resulted in lower rehabilitation than predicted. It is noted however that the the MOP rehabilitation targets were exceeded in both 2021 and 2022.	Non-compliant	Continue progressive rehabilitation works with the objective of meeting the established progressive rehabilitation targets
D1-C6	Protection of the environment and rehabilitation Rehabilitation must achieve final land use	(1) The holder of a mining lease must ensure that rehabilitation of the mining area achieves the final land use for the mining area.				The condition has not been triggered and it applies to the final landform,	Not Triggered	
		(2) The holder of the mining lease must ensure any planning approval has been obtained that is necessary to enable the holder to comply with subclause (1).	Planning Approvals: <ul style="list-style-type: none">SSD 6464; andSSD 6465.			The required planning approvals are in place.	Complies	

Standard Mining Lease Terms (Applies from 2 July 2022)

Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
D1-C6	Protection of the environment and rehabilitation Rehabilitation must achieve final land use	(3) The holder of the mining lease must identify and record any reasonably foreseeable hazard that presents a risk to the holder's ability to comply with subclause (1) . Note— Clause 7 requires a rehabilitation risk assessment to be conducted whenever a hazard is identified under this subclause.	Rehabilitation Management Plan Version 1, dated 28 July 2022.			Appendix 1 of the Rehabilitation Management Plan contains the Rehabilitation Risk Assessment. Section 10 identifies the proposed contingency strategies to be implemented in the event of the identification of hazards that may impact final land uses or rehabilitation outcomes.	Complies	
		(4) In this clause—final land use for the mining area means the final landform and land uses to be achieved for the mining area— a. as set out in the rehabilitation objectives statement and rehabilitation completion criteria statement, and				Explanatory Clause Only.	Noted	
D1-C6	Protection of the environment and rehabilitation Rehabilitation must achieve final land use	b. for a large mine—as spatially depicted in the final landform and rehabilitation plan, and				Explanatory Clause Only.	Noted	
		c. if the final land use for the mining area is required by a condition of development consent for activities under the mining lease—as stated in the condition.				Explanatory Clause Only.	Noted	
		Planning Approval Means a) a development consent within the meaning of the <i>Environmental Planning and Assessment Act 1979</i> , or				Explanatory Clause Only.	Noted	
		b) an approval under that Act, Division 5.1.				Explanatory Clause Only.	Noted	
D2-7	Risk Assessment Rehabilitation risk assessment	(1) The holder of a mining lease must conduct a risk assessment (a rehabilitation risk assessment) that— a) identifies, assesses, and evaluates the risks that need to be addressed to achieve the following in relation to the mining lease— (i) the rehabilitation objectives, (ii) the rehabilitation completion criteria (iii) for large mines—the final land use as spatially depicted in the final landform and rehabilitation plan, and	Rehabilitation Management Plan Version 1, dated 28 July 2022.			A Rehabilitation Risk Assessment was completed on 30 May 2022 Appendix 1 of the Rehabilitation Management Plan contains the Rehabilitation Risk Assessment. Section 10 identifies the proposed contingency strategies to be implemented in the event of the identification of hazards that may impact final land uses or rehabilitation outcomes.	Complies	
		b) identifies the measures that need to be implemented to eliminate, minimise or mitigate the risks.	Rehabilitation Management Plan Version 1, dated 28 July 2022.				Complies	

Standard Mining Lease Terms (Applies from 2 July 2022)

Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
D2-7	Risk Assessment Rehabilitation risk assessment	(2) The holder of the mining lease must implement the measures identified.	Annual Rehabilitation Report 2022, Version 2, dated 5 June 2023			The Annual Rehabilitation Report 2022 identifies performance against the agreed rehabilitation performance measures. Six management recommendations were identified to improve the condition of rehabilitation areas and ensure they are trending towards the defined final land use objectives.	Complies	
		(3) The holder of a mining lease must conduct a rehabilitation risk assessment— (a) for a large mine—before preparing a rehabilitation management plan, and (b) for a small mine—before preparing the rehabilitation outcome documents for the mine, and (c) whenever a hazard is identified under clause 6(3)—as soon as reasonably practicable after it is identified, and (d) whenever given a written direction to do so by the Secretary	Rehabilitation Management Plan Version 1, dated 28 July 2022.	Environment and Community Manager - The Secretary has not requested that a further risk assessment be conducted.			A Rehabilitation Risk Assessment was completed on 30 May 2022 Appendix 1 of the Rehabilitation Management Plan contains the Rehabilitation Risk Assessment. Section 10 identifies the proposed contingency strategies to be implemented in the event of the identification of hazards that may impact final land uses or rehabilitation outcomes. The Secretary has not requested that a further risk assessment be conducted.	Complies
D3-8	Records, Reporting and Notification Application of Division 3	(1) This Division does not apply to a mining lease unless— a) the security deposit required under the mining lease is greater than the minimum deposit prescribed under the Act, section 261BF in relation to that type of mining lease, or b) the Secretary gives a written direction to the holder of the mining lease that this Division, or a provision of this Division, applies to the mining lease.				This condition is administrative only. Lodgement of the security deposits required for each of the mining leases was verified in the 2020 IEA. The value of those deposits is greater than the minimum security deposit set under the Mining Act Regulations. Therefore, this division applies.	Noted	
D3-9	Rehabilitation Documents General requirements for documents	A document required to be prepared under this Division must— (a) be in a form approved by the Secretary, and	Rehabilitation Management Plan Version 1, dated 28 July 2022.			The rehabilitation Management Plan has been reviewed by DPE and the Resources Regulator. The final plan has been approved by DPE.	Complies	
		(b) include any matter required to be included by the form, and	Rehabilitation Management Plan Version 1, dated 28 July 2022.			The rehabilitation Management Plan has been reviewed by DPE and the Resources Regulator. The final plan has been approved by DPE.	Complies	
		(c) if required to be given to the Secretary—be given in a way approved by the Secretary.	Rehabilitation Management Plan Version 1, dated 28 July 2022.			The rehabilitation Management Plan has been reviewed by DPE and the Resources Regulator. The final plan has been approved by DPE.	Complies	

Standard Mining Lease Terms (Applies from 2 July 2022)

Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
D3 C10	Rehabilitation Documents Rehabilitation management plans for large mines	(1) The holder of a mining lease relating to a large mine must prepare a plan (a rehabilitation management plan) for the mining lease that includes the following—	Rehabilitation Management Plan Version 1, dated 28 July 2022.			The rehabilitation Management Plan has been reviewed by DPE and the Resources Regulator. The final plan has been approved by DPE.	Complies	
		(a) a description of how the holder proposes to manage all aspects of the rehabilitation of the mining area	Rehabilitation Management Plan Version 1, dated 28 July 2022.			Section 6 of the Rehabilitation Management Plan describes the rehabilitation schedule and methodology.	Complies	
		(b) a description of the steps and actions the holder proposes to take to comply with the conditions of the mining lease that relate to rehabilitation,	Rehabilitation Management Plan Version 1, dated 28 July 2022.			Section 6 of the Rehabilitation Management Plan describes the rehabilitation schedule and methodology.	Complies	
		(c) a summary of rehabilitation risk assessments conducted by the holder,	Rehabilitation Management Plan Version 1, dated 28 July 2022.			Section 3 of the Rehabilitation Management Plan describes risk assessment process and Appendix 1 provides a copy of the risk assessment undertaken as part of the preparation of the plan.	Complies	
		(d) the risk control measures identified in the rehabilitation risk assessments,	Rehabilitation Management Plan Version 1, dated 28 July 2022.			Table 23 describes the actions to be taken to mitigate / manage risks associated with the rehabilitation of the mine.	Complies	
		(e) the rehabilitation outcome documents for the mining lease	Rehabilitation Management Plan Version 1, dated 28 July 2022.			The requirements of the rehabilitation outcome document are provided in Section 4 of the approved Rehabilitation Management Plan. Section 4 presents the rehabilitation objectives and completion criteria.	Complies	
		(f) a statement of the performance outcomes for the matters addressed by the rehabilitation outcome documents and the ways in which those outcomes are to be measured and monitored.	Rehabilitation Management Plan Version 1, dated 28 July 2022.			Section 8 describes the rehabilitation monitoring program.	Complies	
		(2) If a rehabilitation outcome document has not been approved by the Secretary, the holder of the mining lease must include a proposed version of the document.	Rehabilitation Management Plan Version 1, dated 28 July 2022.			The requirements of the rehabilitation outcome document are provided in Section 4 of the approved Rehabilitation Management Plan. Section 4 presents the rehabilitation objectives and completion criteria.	Complies	
		(3) A rehabilitation management plan is not required to be given to the Secretary for approval.				Administrative Condition only	Noted	
(4) The holder of the mining lease— (a) must implement the matters set out in the rehabilitation management plan, and (b) if the forward program specifies timeframes for the implementation of the matters— must implement the matters within those timeframes	Rehabilitation Management Plan Version 1, dated 28 July 2022.				The MOP rehabilitation targets were exceeded in both 2021 and 2022.	Complies		

Standard Mining Lease Terms (Applies from 2 July 2022)

Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
D3 C11	Rehabilitation Documents Amendment of Rehabilitation Plans	The holder of a mining lease must amend the rehabilitation management plan for the mining lease as follows— a) to substitute the proposed version of a rehabilitation outcome document with the version approved by the Secretary—within 30 days after the document is approved	Rehabilitation Management Plan Version 1, dated 28 July 2022.			The Rehabilitation Management Plan was revised and reissued on 28 May 2022 and now includes (Section 4) the requirements for Rehabilitation Outcome Document.	Complies	
		b) as a consequence of an amendment made under clause 14 to a rehabilitation outcome document—within 30 days after the amendment is made,				No amendments to the rehabilitation outcome document have been made during the audit period.	Not Triggered	
		c) to reflect any changes to the risk control measures in the prepared plan that are identified in a rehabilitation risk assessment—as soon as practicable after the rehabilitation risk assessment is conducted,		Environment and Community Manager – No additional rehabilitation risks have been identified during this Audit Period.		No additional rehabilitation risks have been identified during this Audit Period.	Not Triggered	
		d) whenever given a written direction to do so by the Secretary—in accordance with the direction.		Environment and Community Manager – No requests were made by the Resource Regulator for revisions of the RMP.		No requests were made by the Resource Regulator for revisions of the RMP.	Not Triggered	
D3 C12	Rehabilitation Documents Rehabilitation outcome documents	(1) The holder of a mining lease must prepare the following documents (the rehabilitation outcome documents) for the mining lease and give them to the Secretary for approval— a) the rehabilitation objectives statement , which sets out the rehabilitation objectives required to achieve the final land use for the mining area	Rehabilitation Management Plan Version 1, dated 28 July 2022.			Section 4 of the Rehabilitation Management Plan provides a description of the rehabilitation objectives for the complex.	Complies	
		b) the rehabilitation completion criteria statement, which sets out criteria, the completion of which will demonstrate the achievement of the rehabilitation objectives,	Rehabilitation Management Plan Version 1, dated 28 July 2022.			Section 4 of the Rehabilitation Management Plan provides a description of the rehabilitation completion criteria for the complex.	Complies	
		c) for a large mine, the final landform and rehabilitation plan, showing aspatial depiction of the final land use.	Rehabilitation Management Plan Version 1, dated 28 July 2022.			Section 5 of the Rehabilitation Management Plan provides the final landform and rehabilitation plan for the complex.	Complies	
		d) If the final land use for the mining area is required by a condition of development consent for activities under the mining lease, the holder of the mining lease must ensure the rehabilitation outcome documents are consistent with that condition.	Planning Approvals SSD 6464 and SSD 6465			The planning approvals for the MTW complex do not specify requirements for final landuse for either Warkworth or Mt Thorley.	Not Triggered	

Standard Mining Lease Terms (Applies from 2 July 2022)

Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
D3 C13	Rehabilitation Documents Forward program and annual rehabilitation report	(1) The holder of a mining lease must prepare a program (a forward program) for the mining lease that includes the following— a) a schedule of mining activities for the mining area for the next 3 years,	Forward Program – 2023 to 2025 Version 2, dated 5 June 2023.			The first Forward Program required by this Condition has been prepared and has been uploaded to the MTW Website. Section 1.2.3 provides the mining schedule for the next three years.	Complies	
		b) a summary of the spatial progression of rehabilitation through its various phases for the next 3 years,				Section 2.0 provides the three-year rehabilitation forecast that includes the special progression of rehabilitation.	Complies	
		c) a requirement that the rehabilitation of land and water disturbed by mining activities under the mining lease must occur as soon as reasonably practicable after the disturbance occurs.				Section 2.0 provides the three-year rehabilitation forecast.	Complies	
		(2) The holder of a mining lease must prepare a report (an annual rehabilitation report) for the mining lease that includes—	Annual Rehabilitation Report – 2022, Version 2.0, dated 1 May 2023.			The 2022 annual report has been prepared and is available on the MTW website.	Complies	
		(a) a description of the rehabilitation undertaken over the annual reporting period,	Annual Rehabilitation Report – 2022, Version 2.0, dated 1 May 2023.			Section 4 of the annual rehabilitation report provides a description of the surface disturbance and rehabilitation actions taken during the reporting period.	Complies	
		(b) a report demonstrating the progress made through the phases of rehabilitation provided for in the forward program applying to the reporting period,	Annual Rehabilitation Report – 2022, Version 2.0, dated 1 May 2023.			Section 5.2 of the annual rehabilitation report provides a report on rehabilitation progress against the rehabilitation objectives and completion criteria.	Complies	
		(c) a report demonstrating progress made towards the achievement of the following— (i) the objectives set out in the rehabilitation objectives statement, (ii) the criteria set out in the rehabilitation completion criteria statement, (iii) for large mines—the final land use as spatially depicted in the final landform and rehabilitation plan.	Annual Rehabilitation Report – 2022, Version 2.0, dated 1 May 2023.			Section 5.2 of the annual rehabilitation report provides a report on rehabilitation progress against the rehabilitation objectives and completion criteria.	Complies	
		(3) If a rehabilitation outcome document has not been approved by the Secretary, the holder of the mining lease must rely on a proposed version of the document.	Rehabilitation Management Plan Version 1, dated 28 July 2022.			The rehabilitation Outcome Document is contained within the Approved Rehabilitation Management Plan	Not Triggered	

Standard Mining Lease Terms (Applies from 2 July 2022)

Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations	
D3 C13	Rehabilitation Documents Forward program and annual rehabilitation report	(4) The holder of the mining lease must give the forward program and annual rehabilitation report to the Secretary.	<p>Email from the Resources Regulator to MTW (B Baxter) titled "Mount Thorley Warkworth Complex Forward Program submission FWP0001168", dated 1 May 2023, confirming receipt of the forward program.</p> <p>Email (titled "Extension Request for Submission of MTW Annual Rehabilitation report and Forward Program", dated 31 March 2023) from the Resources Regulator.</p> <p>Email from the Resources Regulator (b Walsh) to MTW (B Baxter) titled "MTW ARR Submission", dated 1 May 2023, confirming that the RR was experiencing IT issues that were impacting the recording of submission dates.</p>	<p>The Resources Regulator approved an extension to the date of submission of the Forward Program to 1 May 2023. The Annual Rehabilitation Report and the Forward Program were submitted via the Resources Regulator portal on 1 May 2023.</p> <p>Note: There were some IT issues with the system which meant the Annual Rehabilitation Report was confirmed as submitted on by email from RR on 22 May 2023.</p>		<p>The forward program and annual rehabilitation report were submitted to the Resource Regulator on 1 May 2023.</p>	Complies		
		(5) In this clause—annual reporting period means each period of 12 months commencing on—					Administrative Condition Only	Noted	
D3 C14	Rehabilitation Documents Amendment of rehabilitation outcome documents and forward program	(1) This clause applies to—							
		(a) a rehabilitation outcome document if the Secretary has approved it, and				Administrative Condition Only	Noted		
		(b) a forward program if it has been given to the Secretary.				Administrative Condition Only	Noted		
		(2) The holder of a mining lease must not amend a document to which this clause applies that relates to the mining lease unless—					The rehabilitation Outcome Document as presented in the Rehabilitation Management Plan has not been amended during this audit period.	Not Triggered	
		(a) the Secretary gives the holder a written direction to do so, or					The rehabilitation Outcome Document as presented in the Rehabilitation Management Plan has not been amended during this audit period.	Not Triggered	
		(b) the Secretary, on written application by the holder, gives a written approval of the amendment					The rehabilitation Outcome Document as presented in the Rehabilitation Management Plan has not been amended during this audit period.	Not Triggered	
		(3) The holder of the mining lease must amend the document in accordance with the Secretary's direction or approval.					The rehabilitation Outcome Document as presented in the Rehabilitation Management Plan has not been amended during this audit period.	Not Triggered	
(4) Nothing in this clause prevents the holder of a mining lease preparing a draft amendment for submission to the Secretary for approval						Noted			

Standard Mining Lease Terms (Applies from 2 July 2022)

Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
D3-15	Rehabilitation Documents Times at which documents must be prepared and given	(1) The holder of a mining lease must do the following before the end of the initial period— a) prepare a rehabilitation management plan, and	Rehabilitation Management Plan Version 1, dated 28 July 2022.			The Rehabilitation Management Plan has been reviewed and approved by the Resources Regulator. The final plan has been approved by DPE.	Complies	
		b) prepare rehabilitation outcome documents and give them, other than the rehabilitation completion criteria statement, to the Secretary for approval, and	Rehabilitation Management Plan Version 1, dated 28 July 2022.			The Rehabilitation Management Plan has been reviewed and approved by the Resources Regulator. The final plan has been approved by DPE.	Complies	
		c) prepare a forward program and give it to the Secretary.	Email for the Resources Regulator confirming receipt of the Annual Rehabilitation Report and Forward Plan on 1 May 2023.	The Resources Regulator approved an extension to the date of submission of the Forward Program to 1 May 2023. The Annual Rehabilitation Report and the Forward Program were submitted via the Resources Regulator portal on 1 May 2023.		The forward program and annual rehabilitation report were submitted to the Resource Regulator on 1 May 2023.	Complies	
		(2) The holder of the mining lease must prepare a forward program and annual rehabilitation report and give them to the Secretary before— a) 60 days after the last day of each annual reporting period, commencing with the annual reporting period in which the forward program was given to Secretary under subclause (1)(c), or	Email from the Resources Regulator to MTW (B Baxter) titled “Mount Thorley Warkworth Complex Forward Program submission FWP0001168”, dated 1 May 2023, confirming receipt of the forward program. Email (titled “Extension Request for Submission of MTW Annual Rehabilitation report and Forward Program”, dated 31 March 2023) from the Resources Regulator. Email from the Resources Regulator (b Walsh) to MTW (B Baxter) titled “MTW ARR Submission”, dated 1 May 2023, confirming that the RR was experiencing IT issues that were impacting the recording of submission dates.			Refer to Clause 2(b) below.	Not Triggered	
		b) a later date approved by the Secretary.	Email from the Resource Regulator to MTW (titled “Extension Request for Submission of MTW Annual Rehabilitation report and Forward Program”, dated 31 March 2023).			The Resource Regulator approved an extension to the reporting time to 1 May 2023. The forward program and annual rehabilitation report were submitted to the RR on 1 May 2023.	Complies	
		(3) A rehabilitation completion criteria statement relating to completion of rehabilitation during a period covered by a forward program must be given to the Secretary for approval when the forward program is required to be given to the Secretary.	Annual Rehabilitation Report – 2022, Version 2.0, dated 1 May 2023.	Environment and Community Manager – no areas of rehabilitation have been completed on the MTW complex.		No areas of rehabilitation have been completed on the MTW complex.	Not Triggered	

Standard Mining Lease Terms (Applies from 2 July 2022)

Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
D3-15	Rehabilitation Documents Times at which documents must be prepared and given	(4) The holder of the mining lease must prepare updated rehabilitation outcome documents for the mining lease and give them to the Secretary for approval before— (a) 60 days after a development consent is modified following an application referred to in clause 20(1)(b), or				No modifications to the Approvals have been approved since the issue of the current rehabilitation outcome documents.	Not Triggered	
		(b) a later date approved by the Secretary				No modifications to the Approvals have been approved since the issue of the current rehabilitation outcome documents.	Not Triggered	
		(5) A rehabilitation completion criteria statement is not required to be given to the Secretary under subclause (4) unless a rehabilitation completion criteria statement has already been given to the Secretary under subclause (3).				Administrative Statement only	Noted	
		(6) The Secretary may, by written notice, direct the holder of a mining lease to prepare, or give to the Secretary, a document required to be prepared under this Division at a time other than that specified in this clause.		Environment and Community Manager – no notices have been issued by the Resource Regulator regarding the preparation of the rehabilitation outcome documents during this audit period.		No notices have been issued by the Resource Regulator regarding the preparation of the rehabilitation outcome documents during this audit period.	Not Triggered	
		(7) The holder of the mining lease must comply with the direction.		Environment and Community Manager – no notices have been issued by the Resource Regulator regarding the preparation of the rehabilitation outcome documents during this audit period.		No notices have been issued by the Resource Regulator regarding the preparation of the rehabilitation outcome documents during this audit period.	Not Triggered	
		(8) In this clause—initial period means the period commencing when the mining lease is granted and ending— (a) 30 days, or other period approved by the Secretary, after this Division first applies to the mining lease, or				Administrative Condition Only	Noted	
		(b) if this Division applies to the mining lease because of an increase in the required security deposit— (i) when the surface of the mining area is disturbed by activities under the mining lease, or (ii) at a later date approved by the Secretary.				Administrative Condition Only	Noted	

Standard Mining Lease Terms (Applies from 2 July 2022)

Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
D3-16	Rehabilitation Documents Certain documents to be publicly available	(1) This clause applies to the following documents— a) a rehabilitation management plan, b) a forward program, c) an annual rehabilitation report				Administrative Condition Only	Noted	
		(2) The holder of a mining lease must make a document to which this clause applies publicly available by— (a) publishing it on its website in a prominent position, or	MTW Website			The Rehabilitation Outcome documents (including the Rehabilitation Management Plan) have been uploaded to the MTW website.	Complies	
		(b) if the holder does not have a website— providing a copy of it to a person— (i) on the written request of a person, and (ii) without charge, and (iii) within 14 days after the request is received.	MTW Website			The Rehabilitation Outcome documents (including the Rehabilitation Management Plan) have been uploaded to the MTW website.	Not Triggered	
		(3) If a document is published on the website of the holder of the mining lease, the holder must ensure that it is published— (a) for a rehabilitation management plan—within 14 days after it is prepared or amended, or	MTW Website			The Rehabilitation Outcome documents (including the Rehabilitation Management Plan) have been uploaded to the MTW website.	Complies	
		(b) for a forward program or an annual rehabilitation report— within 14 days after it is given to the Secretary or amended,				The Rehabilitation Outcome documents (including the Rehabilitation Management Plan) have been uploaded to the MTW website.	Complies	
		(4) Personal information within the meaning of the Privacy and Personal Information Protection Act 1998 is not required to be included in a document made available to a person under this clause.				Administrative Condition Only	Noted	
D4-17	Records, Reporting and Notification Records demonstrating compliance	The holder of a mining lease must create and maintain records of all actions taken that demonstrate compliance with each of the conditions set out in this Part. Note— The Act, sections 163D and 163E provide for the form in which records must be kept and the period for which they must be retained.				All records requested by the Auditor were made available during this IEA.	Complies	

Standard Mining Lease Terms (Applies from 2 July 2022)

Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
D4-C18	Records, Reporting and Notification Report on non-compliance	(1) The holder of a mining lease must provide the Minister with a written report detailing any non-compliance with- (a) a condition of the mining lease, or		Environment and Community Manager – no non-compliances against the standard conditions for the mining leases have occurred.		No non-compliances against the Standard Mining Lease Conditions (since 2 July 2022 when these conditions came into force) have been identified during this IEA.	Note Triggered	
		(b) a requirement of the Act or this Regulation relating to activities under the mining lease.		Environment and Community Manager – no non-compliances against the standard conditions for the mining leases have occurred.		No non-compliances against the Standard Mining Lease Conditions (since 2 July 2022 when these conditions came into force) have been identified during this IEA.	Note Triggered	
		(2) The holder of the mining lease must provide the report within 7 days after becoming aware of the non-compliance		Environment and Community Manager – no non-compliances against the standard conditions for the mining leases have occurred.		No non-compliances against the Standard Mining Lease Conditions (since 2 July 2022 when these conditions came into force) have been identified during this IEA.	Note Triggered	
		(3) The holder of the mining lease must ensure the report— a) identifies the condition of the mining lease, or the requirement of the Act or this Regulation, to which the non-compliance relates, and		Environment and Community Manager – no non-compliances against the standard conditions for the mining leases have occurred.		No non-compliances against the Standard Mining Lease Conditions (since 2 July 2022 when these conditions came into force) have been identified during this IEA.	Note Triggered	
		b) describes the non-compliance and specifies the date or dates on which, or the period during which, the non-compliance occurred, and		Environment and Community Manager – no non-compliances against the standard conditions for the mining leases have occurred.		No non-compliances against the Standard Mining Lease Conditions (since 2 July 2022 when these conditions came into force) have been identified during this IEA.	Note Triggered	
		c) describes the causes or likely causes of the non-compliance, and		Environment and Community Manager – no non-compliances against the standard conditions for the mining leases have occurred.		No non-compliances against the Standard Mining Lease Conditions (since 2 July 2022 when these conditions came into force) have been identified during this IEA.	Note Triggered	
		d) describes the action that has been taken, or will be taken, to mitigate the effects, and to prevent any recurrence, of the non-compliance.		Environment and Community Manager – no non-compliances against the standard conditions for the mining leases have occurred.		No non-compliances against the Standard Mining Lease Conditions (since 2 July 2022 when these conditions came into force) have been identified during this IEA.	Note Triggered	

Standard Mining Lease Terms (Applies from 2 July 2022)

Cond.	Title	Condition	Documents Reviewed	Interviews	Audit Inspections	Assessment	Finding	Recommendations
D4-C19	Records, Reporting and Notification Nominated contact person	(1) The holder of a mining lease must nominate a natural person to be the contact person with whom the Secretary can communicate in relation to the mining lease for the purposes of the Act. Note — The Act, section 383 sets out the ways in which notices or other documents may be issued or given to, or served on, a person for the purposes of the Act.	Letter from MTW (D Moul / M Jacobs) to the NRAR titled “Mt Thorley Warkworth Complex Nominated Contact”, dated 21 December 2022.			MTW has nominated contact persons for each mining lease associated with the Mr Thorley Warkworth Complex.	Complies	
		(2) The holder of the mining lease must give written notice to the Secretary of— (a) the full name and contact details of the nominated person—within 28 days after the date on which the standard conditions apply to the mining lease under clause 31A of this Regulation, and	Email from NRAR to MTW (K Adamthwaite) titled “(Nominated Contact Person - Mount Thorley Warkworth Complex)”, dated 18 July 2022.			MTW advised the NRAR of the nominated contact persons details with the 28-day time frame required by this condition.	Complies	
		(b) any change in nomination or in the nominated person’s contact details—within 28 days after the change occurs.				Not triggered in this audit period.	Not Triggered	
		(3) The holder of the mining lease must ensure that the contact details for the nominated person include the person’s phone number and postal and email addresses.	Letter from MTW (D Moul / M Jacobs) to the NRAR titled “Mt Thorley Warkworth Complex Nominated Contact”, dated 21 December 2022.			Contact details for the nominated persons has been provided to the NRAR.	Complies	
D5-20	Applications relating to development consent Additional requirements— application for or to modify development consent	(1) The holder of a mining lease must give written notice to the Secretary within 10 days after— (a) making an application for development consent that relates to the mining area, or	Planning Approvals: • SSD 6464; and • SSD 6465.			Both the Mt Thorley and Warkworth projects have been approved as State Significant Developments.	Not Triggered	
		(b) making an application for modification of a development consent— (i) under the <i>Environmental Planning and Assessment Act 1979</i> , section 4.55(2), and (ii) that proposes to modify a condition of the consent that relates to rehabilitation of the mining area in a way that may affect an obligation under the mining lease relating to rehabilitation of the mining area.	Planning Approvals: • SSD 6464; and • SSD 6465.			Both the Mt Thorley and Warkworth projects have been approved as State Significant Developments.	Not Triggered	
		(2) This clause does not apply if the development is State significant development.	Planning Approvals: • SSD 6464; and • SSD 6465.			Administrative Condition Only.	Noted	

Compliance Registers Warkworth Mining Leases

Cond	Detail	Evidence Reference	CCL 753
1	Optimise Coal Extraction	SSD 6464 / S2 C6	Complies
2	Operation in accordance with MOP	SSD 6464 / S3 C57	Non-compliance
3	Prepare and issue AEMR	SSD 6464 / S5 C4	Complies
14	Shafts & Adit Safety	Incident Register	Complies
15	Dumps - Comply Inspector Directions	Section 7.7.3	Complies
16	Comply with directions to spray coal dumps	Section 7.7.3	Not Triggered
17	Minimise Dust	SSD 6464 / S3 C19	Non-compliance
18	No interference with fences	Incident Register	Complies
19	No damage to public infrastructure	SSD 6464 / S2 C12	Not Triggered
20	Undertake dilapidation surveys if directed	Section 7.7.3	Not Triggered
21	Rehabilitate land as directed.	Section 7.7.3	Not Triggered
22	Remove structures at closure		Not Triggered
23	Rehabilitate land as directed.	Section 7.7.3	Not Triggered
24	Prevent fire	SSD 6464 / S3 C54	Complies
25	Environmental Protection	SSD 6464 / S3 C24	Non-compliance
26	Monitor blasting	SSD 6464 / S3 C8	Complies
27	Minimise disturbance to flora and fauna	SSD 6464 / S3 C36	Complies
29	Establish arboreal screen	SSD 6464 / S3 C36	Complies
30	Minimise erosion	SSD 6464 / S3 C26	Complies
31	Pay Council for any road damage	SSD 6464 / S2 C12	Not Triggered
32	If required realign roads	SSD 6464 / S3 C47 - 50	Complies
38	All access to travelling stock		Noted
39	All access to travelling stock		Noted
41	No not interfere with power lines etc	SSD 6464 / S2 C12	Not Triggered
42	Consent from Energy Australia	SSD 6464 / S2 C13	Not Triggered
44	Labour / expenditure	SSD 6464 / S2 C6	Complies
45	Provide info if requested		Noted
46	Service of notices		Noted
47	Cooperate with inspectors		Noted
48	Indemnities		Noted
49	Indemnify the Crown		Noted
50	Prospecting		Not Triggered
51	Security Deposit	Previous IEA	Complies
54	Royalty rate		Noted
55	Fix damage to power lines	SSD 6464 / S2 C12	Not Triggered
56	Construct and maintain dams to satisfy Inspector		Noted

Cond.	Detail	Evidence Reference	ML 1412
1	Optimise Coal Extraction	SSD 6464 / S2 C6	Complies
2	No underground without approval		Not Triggered
3	No open cut without approval	SSD6464	Complies
15	Dumps and Prep Plant - comply with directions	Section 7.7.3	Not Triggered
17	Minimise Dust	SSD 6464 / S3 C19	Non-compliance
18	No interference with fences	Incident Register	Complies
19	No damage to public infrastructure	SSD 6464 / S2 C12	Not Triggered
21	Prepare and issue AEMR	SSD 6464 / S5 C4	Complies
22	rehabilitate land as directed.		
23	Remove structures at closure		Not Triggered
24	rehabilitate land as directed.	Section 7.7.3	Not Triggered
25	Prevent fire	SSD 6464 / S3 C54	Complies
26	Monitor blasting	SSD 6464 / S3 C8	Complies
27	Environmental Protection	SSD 6464 / S3 C24	Non-compliance
28	Minimise disturbance to flora and fauna	SSD 6464 / S3 C36	Complies
29	No felling trees except with landowner approval		Noted
30	Establish arboreal screen	SSD 6464 / S3 C36	Complies
31	Minimise erosion	SSD 6464 / S3 C26	Complies
42	No not interfere with power lines etc	SSD 6464 / S2 C12	Not Triggered
43	Consent from Ausgrid	SSD 6464 / S2 C13	Not Triggered
44	Protect Indigenous Heritage	SSD 6464 / S3 C43	Complies
56	Roads - realign Putty Road	SSD 6464 / S3 C47 - 50	Complies
45	Labour / expenditure	SSD 6464 / S2 C6	Complies
46	Provide info if requested		Noted
47	Service of notices		Noted
48	Cooperate with inspectors		Noted
49	Indemnities		Noted
50	Indemnify the Crown		Noted
51	Prospecting		Not Triggered
52	Security Deposit	Previous IEA	Complies
55	Royalty rate		Noted

Cond.	Detail	Evidence Reference	ML 1590
1	Land holder notices	Previous IEA Reports	Complies
2	Operation in accordance with MOP	SSD 6464 / S3 C57	Non-compliance
3	Prepare and issue AEMR	SSD 6464 / S5 C4	Complies
4	Subsidence Management	No Underground Works	Not Triggered
5	Labour / expenditure	SSD 6464 / S2 C6	Complies
6	Inspector can stop works		Noted
7	Exploration Reports		Noted
8	Use of reports by Minister		Noted
9	Confidentiality		Noted
10	Use of reports by Minister		Noted
11	Blasting	SSD 6464 / S3 C8	Complies
12	Mine safely	Incident Register	Complies
13	Rehab site in accordance with MOP	SSD 6464 / S3 C57	Non-compliance
14	Rehab site in accordance with Directions	Section 7.7.3	Not Triggered
15	Exploratory Drilling - notify 28 days prior		Noted
16	Prevent Soil Erosion	SSD 6464 / S3 C26	Complies
17	No not interfere with power lines etc	SSD 6464 / S2 C12	Not Triggered
18	No not interfere with fences etc	Incident Register	Complies
19	No not interfere with Roads etc	SSD 6464 / S2 C12	Not Triggered
20	Keep access tracks to a minimum		Noted
21	No felling trees except with landowner approval		Noted
22	Optimise Coal Extraction	SSD 6464 / S2 C6	Complies
23	Indemnities		Noted
24	Env Incident Reporting	Incident Register	Complies
25	Security Deposit		Noted

Cond.	Detail	Evidence Reference	ML 1751
1	Land holder notices	Previous IEA Reports	Complies
2	Rehabilitate to the Satisfaction of the Minister		Noted
3	MOP and Annual Rehab Report	SSD 6464 / S3 C57	Non-compliance
4	Compliance Report	SSD 6464 / S5 C4	Complies
5	Incident Reporting	Incident Register	Complies
6	Extraction Plan	No underground works	Not Triggered
7	Resource Recovery - optimise	SSD 6464 / S2 C6	Complies
8	Group Security		Noted
9	Cooperation Agreement with overlapping leases		Noted

Compliance Registers Mt Thorley Mining Leases

Cond.	Detail	Evidence Reference	CL 219
1	Optimise Coal Extraction	SSD 6465 / S2 C6	Complies
2	Operation in accordance with MOP	SSD 6465 / S3 C35	Non-compliance
3	Prepare and issue AEMR	SSD 6465 / S5 C4	Complies
9	Underground Workings	No underground works	Not Triggered
14	Shafts & Adit Safety	Incident Register	Complies
15	Dumps - Comply Inspector Directions	Section 7.7.3	Complies
16	Comply with directions to spray coal dumps	Section 7.7.3	Not Triggered
17	Minimise Dust	SSD 6465 / S3 C17	Non-compliance
18	No interference with fences	Incident Register	Complies
19	No damage to public infrastructure	SSD 6465 / S2 C12	Not Triggered
20	Undertake dilapidation surveys if directed	Section 7.7.3	Not Triggered
21	Rehabilitate land as directed.	Section 7.7.3	Not Triggered
22	Remove structures at closure		Not Triggered
23	Rehabilitate land as directed.	Section 7.7.3	Not Triggered
24	Prevent fire	SSD 6465 / S3 C32	Complies
25	Environmental Protection	SSD 6465 / S3 C22	Non-compliance
26	Monitor blasting	SSD 6465 / S3 C8	Complies
27	Minimise disturbance to flora and fauna	SSD 6465 / S3 C36	Complies
29	Establish arboreal screen	SSD 6465 / S3 C36	Complies
30	Minimise erosion	SSD 6465 / S3 C24	Complies
31	Pay Council for any road damage	SSD 6465 / S2 C12	Not Triggered
32	If required realign roads		Not Triggered
33	Do Not pollute the Hunter River	SSD 6465 / S3 C24	Complies
50	Prospecting		Noted
51	Security Deposit		Noted
54	Royalty rate		Noted
55	stay clear of Wollombi Creek	SSD 6465 / S3 C24	Complies

Cond.	Detail	Evidence Reference	ML 1752
2	Rehab to satisfy Minister		Noted
3	Operation in accordance with MOP	SSD 6465 / S3 C35	Complies
4	Annual Compliance Report	SSD 6465 / S5 C4	Complies
5	Env Incident Reporting	Incident Register	Complies
6	Extraction Plan	No underground works	Not Triggered

Audit Photographs

Appendix B



Photograph 1 - Warkworth Open Cut Mine



Photograph 2 - Water Cart



Photograph 3 – Air Quality Station



Photograph 4 - Sediment Basin



Photograph 5 - Stabilised Drain



Photograph 6 - Waste Storage Signage



Photograph 7 - Mt Thorley Open Cut Pit



Photograph 8 - Effluent Irrigation Area



Photograph 9 - Self Bunded Fuel Tank and Generator (Warkworth)



Photograph 10 - Waste sorting and storage at Mt Thorley Maintenance Facility



Photograph 11 - Mt Thorley Heavy Plant Maintenance



Photograph 12 - Dam 1S signage

DPE Correspondence

Appendix C

Department of Planning and Environment

Mr Gary Mulhearn
Environment and Community Manager
Yancoal Mt Thorley Warkworth
PO Box 267 Singleton NSW 2330

15/12/2022

Dear Mr Mulhearn

**Warkworth Continuation - IEA Scope (SSD-6464)
Independent Environmental Audit**

Reference is made to your submission (SSD-6464-PA-69) requesting input from the Department of Planning and Environment (the department) on the scope of the 2023 Independent Environmental Audit (IEA) for development consents SSD-6464 and SSD-6465 (the consents) for the Mt Thorley Warkworth coal mine complex (the project) by Yancoal Mt Thorley Warkworth (MTW) on 14 December 2022.

The department has reviewed the request and notes the following:

- The department accepts MTW's proposed audit timeline with the audit report due to be submitted to the department for review by **15 June 2023**;
- The department notes MTW's proposed audit period to end on 31 December 2022. However, the department requires that the audit period run from 1 May 2020 up to the date of the audit site visit (currently proposed 4 May 2023); and
- In addition to a suitably qualified and independent audit team and ecological expert, the department requests that MTW also seek a suitably qualified and independent Surface Water Specialist.

Please ensure that this correspondence is appended to the final audit report.

Should you wish to discuss the matter further, please contact James Epstein, Senior Compliance Officer, on (02) 6575 3419 or via email compliance@planning.nsw.gov.au

Yours sincerely



Heidi Watters
Team Leader Northern
Compliance

As nominee of the Planning Secretary

Department of Planning and Environment

Mr Gary Mulhearn
Environment & Community Manager
Yancoal Mt Thorley Warkworth
Wonnaruah Country

By email only: gary.mulhearn@yancoal.com.au

29/03/2023

Dear Mr Mulhearn

Warkworth Continuation - Auditor Endorsement Request (SSD-6464 and SSD-6465)

I refer to your request (SSD-6464-PA-73) for the Secretary's endorsement of suitably qualified persons to prepare the upcoming Independent Environment Audit (IEA) report for the Mount Thorley Warkworth (MTW) complex as required by Schedule 5 Condition 9 of SSD-6464 and SSD-6465 (the consents).

The Department of Planning and Environment (the department) has reviewed the nominations and information you have provided and is satisfied that these experts are suitably qualified and experienced.

Consequently, I can advise that the Planning Secretary approves the appointment of the proposed individuals to undertake the IEA. As such, in accordance with Schedule 5 Condition 9 of the consents, and the Independent Audit Post Approval Requirements, the Secretary has agreed to the following audit team:

- Mr Ken Holmes – Lead Auditor
- Mr Richard Peterson – Support Auditor
- Dr Gitanjali Katrak – Ecological/ Rehabilitation Specialist; and
- Mr Adam Bishop – Surface Water Specialist

Please ensure this correspondence is appended to the IEA Report.

The Independent Audit must be prepared, undertaken and finalised in accordance with the Independent Audit Post Approval Requirements. Failure to meet these requirements will require revision and resubmission.

Should you wish to discuss the matter further, please contact James Epstein, Senior Compliance Officer, on (02) 6575 3419 or email compliance@planning.nsw.gov.au

Yours sincerely



Heidi Watters
Team Leader Northern
Compliance

As nominee of the Planning Secretary

From: no-reply@majorprojects.planning.nsw.gov.au
To: [Gary Mulhearn](#)
Cc: [Gary Mulhearn](#)
Subject: Communication regarding IEA Submission Extension SSD-6464-PA-76
Date: Wednesday, 14 June 2023 2:01:55 PM
Attachments: [..datacontent\img\arte\images\logo1644468813661.png](#)

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Dear Gary ,

Hi Gary

Reference is made to your submission (SSD-6464-PA76) requesting an extension to the submission date of the 2023 Independent Environmental Audit (IEA) report.

The department has reviewed your request and in this instance determined to issue an extension to submit the IEA report under Schedule 5 Condition 10 of SSD-6464 until 14 July 2023.

Please ensure this correspondence is appended to the final report.

If you have any questions I can be contacted on the details below

Regards

James Epstein

Senior Compliance Officer

Development Assessment | Department of Planning and Environment

T 02 6575 3419 | M 0429 395 691 | E james.epstein@planning.nsw.gov.au

PO Box 3145, Singleton NSW 2333

www.dpie.nsw.gov.au

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Kind regards

The Department of Planning and Environment



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From: no-reply@majorprojects.planning.nsw.gov.au
To: [Gary Mulhearn](#)
Cc: [Gary Mulhearn](#)
Subject: Communication regarding Audit Extension Request SSD-6464-PA-77
Date: Thursday, 13 July 2023 12:46:22 PM
Attachments: [..datacontent\imgarte\images\logo1644468813661.png](#)

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Dear Gary ,

Hi Gary

Thank you for your submission requesting an additional extension to submit the IEA report. The department has reviewed your request and agrees to extend the due date for submission of the IEA until 4 August 2023. Please ensure that this correspondence, as well as previous correspondence approving extensions, is appended to the final audit report.

Regards

James Epstein
A/ Team Leader Northern
Development Assessment | Department of Planning and Environment
T 02 6575 3419 | M 0429 395 691 | E james.epstein@planning.nsw.gov.au
PO Box 3145, Singleton NSW 2333

www.dpie.nsw.gov.au

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Consultation Records

Appendix D

From: [James Epstein](#)
To: [Ken Holmes](#)
Cc: [Heidi Watters](#)
Subject: RE: Mount Thorley Warkworth Mine - 2023 Independent Environmental Audit - Consultation Request DPE
Date: Wednesday, 12 April 2023 7:48:55 AM
Attachments: [image001.png](#)

Hi Ken

Thank you for consulting with the department on the upcoming IEA of the Mt Thorley Warkworth Mine.

The department requests that the upcoming IEA pay particular focus to the following items:

- Implementation of the Blast Management Plan, including the completion of pre-blasting requirements and checklists;
- Implementation of the Noise Management Plan, including responses to alarms and complaints from real-time noise monitors; and
- Implementation of the Water Management Plan, specifically during heavy rainfall events

If you would like to discuss further I can be contacted on the details below.

Regards

James Epstein

Senior Compliance Officer

Development Assessment | Department of Planning and Environment

T 02 6575 3419 | M 0429 395 691 | E james.epstein@planning.nsw.gov.au

PO Box 3145, Singleton NSW 2333

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.



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From: Ken Holmes <Ken@baeckea.com.au>
Sent: Thursday, 6 April 2023 10:10 AM
To: Heidi Watters <Heidi.Watters@Planning.nsw.gov.au>; DPE PSVC Compliance Mailbox <compliance@planning.nsw.gov.au>
Subject: Mount Thorley Warkworth Mine - 2023 Independent Environmental Audit - Consultation Request DPE

Good Morning Heidi,

Barnett and May has been commissioned to undertake the 2023 Independent Environmental Audit (**IEA**) of the Mt Thorley Warkworth Mine (SSD 6464 and SSD 6465). The audit will commence in the last week in April 2023. The IEA will be undertaken accordance with Project Approval Conditions that requires:

Within 1 year of the commencement of development, and every 3 years thereafter, unless the Planning Secretary

directs otherwise, the Applicant must commission and pay the full cost of an Independent Environmental Audit

(audit) of the Development. This audit must:

(a) be conducted by a suitably qualified, experienced and independent team of experts (including and odour expert) whose appointment

has been endorsed by the Planning Secretary;

(b) include consultation with the relevant agencies;

(c) assess the environmental performance of the Development and assess whether it is complying with the

requirements in this consent, and any other relevant approvals, relevant EPL(s) or mining lease {including any

assessment, plan or program required under these approvals};

(d) include an assessment – undertaken by an independent expert whose appointment has been endorsed by the BCD – of progress towards implementation of the biodiversity off-set strategy, in particular the regeneration of Warkworth Sands Woodlands against the detailed performance and completion criteria under the Biodiversity management plan;

(e) review the adequacy of any approved strategy, plan or program required under the abovementioned

consents: and

(f) recommend measures or actions to improve the environmental performance of the Development and/or

any strategy, plan or program required under these consents.

The audit will be undertaken in accordance with DPIE's Independent Audit Post Approval Guidelines (May 2020).

The Approval requires that the Auditor consults with relevant agencies. I have been provided me with your contact details as a relevant regulator. I would therefore appreciate if you could provide me with any information, comments or concerns that the DPE may have regarding the environmental performance of the operation (over the past three years – the audit period) and details of any specific issues you suggest that the Auditor considers during the audit.

Please do not hesitate to contact me if you require any additional information.

Thanks and Regards,

Ken Holmes
Lead Auditor

Principal Environmental Consultant
Director

Barnett & May

P +61 [0]438 046 261

E ken@baeckea.com.au

A PO Box 365 Belrose NSW 2085

From: [Corey O'Driscoll](#)
To: [Ken Holmes](#)
Subject: RE: Mount Thorley Warkworth Mine - 2023 Independent Environmental Audit - Consultation Request Heritage NSW
Date: Tuesday, 18 April 2023 5:00:32 PM
Attachments: [image001.png](#)

Hi Ken,

Thank you for getting back to me. I have had a look through our files and spoken to my team members, there is currently no concerns that we are aware of regarding the Mine's management of aboriginal cultural heritage over the past three years. However, I would recommend contacting Department of Planning and Environment's Compliance Team at info@environment.nsw.gov.au as they may be aware of any non-compliance.

Kind regards,
Corey.

Corey O'Driscoll

Senior Assessments Officer (Archaeologist)
Heritage NSW, Environment and Heritage Group
Department of Planning and Environment

Level 3, 11 Farrer Place, Queanbeyan NSW 2620

T: 02 62297079 | Corey.ODriscoll@environment.nsw.gov.au



I acknowledge and respect the traditional custodians and ancestors of the lands I work across.

Please note my work days are Monday to Wednesday. For anything urgent, please contact Nicole Davis (Nicole.davis@environment.nsw.gov.au). Otherwise, I will respond to your email as soon as possible when I am back in the office.

From: Ken Holmes <Ken@baeckea.com.au>
Sent: Thursday, 13 April 2023 8:45 AM
To: Corey O'Driscoll <Corey.ODriscoll@environment.nsw.gov.au>
Subject: RE: Mount Thorley Warkworth Mine - 2023 Independent Environmental Audit - Consultation Request Heritage NSW

Good Morning Corey,

Thanks for your prompt response. In essence, for this Independent Audit, I am seeking inputs on Aboriginal Cultural Heritage, for example:

- Any concerns the Department has relating to the Mine's management of aboriginal cultural heritage over the past three years;
- Any non-compliances (actual or potential) against the relevant heritage legislation;
- Issues related to the implementation of heritage management plans by the proponent.

Please call me if you need any further information.

Thanks,

Ken Holmes
Principal Environmental Consultant
Director

Barnett & May

P +61 (0)438 046 261

E ken@baeckea.com.au

A PO Box 365 Belrose NSW 2085

From: Corey O'Driscoll <Corey.ODriscoll@environment.nsw.gov.au>

Sent: Wednesday, April 12, 2023 3:53 PM

To: Ken Holmes <Ken@baeckea.com.au>

Subject: RE: Mount Thorley Warkworth Mine - 2023 Independent Environmental Audit - Consultation Request Heritage NSW

Dear Ken,

Thank you for getting into contact with Heritage NSW. As Nicole Davis is currently on leave, I have been asked to contact you regarding the Mount Thorley Warkworth Mine Audit.

I see from your request that you would like any information, comments or concerns on the environmental performance of the operation. Can you please provide additional context on the types of information you are concerned with and if this relates only to Aboriginal Cultural Heritage or includes Environmental Heritage. Nicole Davis and myself are within the Aboriginal Cultural Heritage regulatory assessments team and do not necessarily deal with compliance with project approvals nor Environmental Heritage, however I will endeavour to provide the information you require. For concerns on the compliance with conditions of consent and other approvals, I recommend that you contact the Department of Planning and Environment's Compliance Team at info@environment.nsw.gov.au

Please do not hesitate to contact me via email or phone if wish to discuss the project further.

Kind regards,
Corey.

Corey O'Driscoll

Senior Assessments Officer (Archaeologist)
Heritage NSW, Environment and Heritage Group

Department of Planning and Environment

Level 3, 11 Farrer Place, Queanbeyan NSW 2620

T: 02 62297079 | Corey.ODriscoll@environment.nsw.gov.au



I acknowledge and respect the traditional custodians and ancestors of the lands I work across.

Please note my work days are Monday to Wednesday. For anything urgent, please contact Nicole Davis (Nicole.davis@environment.nsw.gov.au). Otherwise, I will respond to your email as soon as possible when I am back in the office.

From: Ken Holmes <Ken@baeckea.com.au>

Sent: Thursday, 6 April 2023 11:55 AM

To: Nicole Davis <Nicole.Davis@environment.nsw.gov.au>

Subject: Mount Thorley Warkworth Mine - 2023 Independent Environmental Audit - Consultation Request Heritage NSW

Good Morning Nicole,

Barnett and May has been commissioned to undertake the 2023 Independent Environmental Audit (**IEA**) of the Mt Thorley Warkworth Mine (SSD 6464 and SSD 6465). The audit will commence in the last week in April 2023. The IEA will be undertaken accordance with Project Approval Conditions that requires:

Within 1 year of the commencement of development, and every 3 years thereafter, unless the Planning Secretary directs otherwise, the Applicant must commission and pay the full cost of an Independent Environmental Audit (audit) of the Development. This audit must:

- (a) be conducted by a suitably qualified, experienced and independent team of experts (including and odour expert) whose appointment has been endorsed by the Planning Secretary;*
- (b) include consultation with the relevant agencies;*
- (c) assess the environmental performance of the Development and assess whether it is complying with the requirements in this consent, and any other relevant approvals, relevant EPL(s) or mining lease {including any assessment, plan or program required under these approvals};*
- (d) include an assessment – undertaken by an independent expert whose appointment has been endorsed by the BCD – of progress towards implementation of the biodiversity off-set strategy, in particular the regeneration of Warkworth Sands Woodlands against the detailed performance and completion criteria under the Biodiversity management plan;*
- (e) review the adequacy of any approved strategy, plan or program required under the abovementioned consents; and*
- (f) recommend measures or actions to improve the environmental performance of the Development and/or any strategy, plan or program required under these consents.*

The audit will be undertaken in accordance with DPIE's Independent Audit Post Approval Guidelines (May 2020).

The Approval requires that the Auditor consults with relevant agencies. I have been provided me with your contact details as a relevant regulator. I would therefore appreciate if you could

provide me with any information, comments or concerns that the Heritage NSW may have regarding the environmental performance of the operation (over the past three years – the audit period) and details of any specific issues you suggest that the Auditor considers during the audit.

Please do not hesitate to contact me if you require any additional information.

Thanks and Regards,

Ken Holmes
Lead Auditor

Principal Environmental Consultant
Director

Barnett & May

P +61 [0]438 046 261

E ken@baeckea.com.au

A PO Box 365 Belrose NSW 2085

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AREQ0039177

Mr Ken Holmes
Barnett & May
PO Box 365
Belrose NSW 2085
By email: ken@baeckea.com.au

Dear Mr Holmes,

Subject: Mount Thorley Warkworth Mine – Independent Environmental Audit

Thank you for your email dated 6 April 2023 requesting consultation on the independent environmental audit to be undertaken of the Mount Thorley Warkworth Mine which is covered by the following mining leases.

- CCL753 (1973)
- CL219 (1973)
- ML1412 (1992)
- ML1590 (1992)
- ML1751 (1992)
- ML1752 (1992)
- ML1828 (1992)

The independent environmental audit is required to assess compliance against the relevant environmental management conditions of the mining leases up to 1 July 2022, including implementation of the mining operations plan for the site.

From 2 July 2022, the independent environmental audit should provide an assessment of compliance with the requirements of Schedule 8A Standard conditions of mining leases, Part 2 Standard conditions, as set out in the Mining Regulation 2016. It is noted that the 7 mining leases that comprise Mount Thorley Warkworth Mine have been approved by the Regulator to be treated as a single lease for the purposes of Part 2 of Schedule 8A.

The audit should note observations where rehabilitation procedures, practices and outcomes represent best industry practice.

It would be appreciated if a copy of the final audit report could be sent to the Regulator at nswresourcesregulator@service-now.com upon completion of the audit.

Yours sincerely

Jenny Ehmsen
Principal Compliance Auditor
12 April 2023

From: [colin.gellatly](#)
To: [Ken Holmes](#)
Cc: [Gary Mulhearn](#)
Subject: Comments for audit
Date: Wednesday, 26 July 2023 10:55:34 AM

The MTW CCC operated throughout the audit period, meeting on a quarterly basis. At the time of the last meeting during the audit period (Q1 2023), the committee comprised five community members, one stakeholder representative, one council representative and the company representatives. During the challenges of COVID, the company facilitated the meetings to occur via teleconference to permit continuation of consultation.

Some of the key issues discussed or raised during the reporting period included:

Blast vibration and overpressure and road closure notification systems

Blast times, road closures and restricted speed zones

Lighting and Visual Amenity

General operational and environmental performance

Operational disturbance vs. rehabilitation performance

Offset properties, Warkworth Sands Woodlands and success rate of plantings

Modification applications to the Warkworth Continuation Project

Exploration activity related to potential future underground mining

Air quality and dust management

Voluntary Planning Agreement with Singleton Council

Company communications with broader community

Aboriginal Cultural Heritage and Historic Heritage management

Community Support Programs.

There were actions raised during the course of CCC meetings, relating to the above and other issues, which were responded to by the company and documented in the relevant meeting minutes.

The company facilitated site tour of operations during the audit period, which was attended by some members of the CCC. Representatives from the Department of Planning and Environment were invited and attended a meeting in Q4 2022 and directly answered queries from CCC members. Singleton Council representatives attended the Q1 2021 meeting to provide an update on the Voluntary Planning Agreement.

In my view as Chairperson, the MTW CCC is operating effectively and as intended by the development consents, and in general accordance with the CCC guidelines. It is anticipated that

similar key issues to those discussed during the audit period will continue to be the focus of the MTW CCC in future years.

6 April 2023

Our Ref: M1-3

Ken Holmes

Lead Auditor

Barnett and May

P O BOX 365

Belrose NSW 2085

Dear Mr Holmes

RE: Mount Thorley Warkworth Mine – 2023 Independent Environmental Audit – Request for Input – Singleton Council

I refer to your email request dated 6 April 2023 requesting comment from Council on the Mount Thorley Warkworth Independent Environmental Audit. This letter forms Council's feedback in relation to that request.

The conditions of approval for SSD 6464 and SSD 6465, require consultation with council on a number of matters, including, but not limited to:

- Planning Agreement
- Biodiversity offsetting and associated subdivision of land
- Historic Heritage Management Plan
- Transport
- Waste (Onsite Sewerage Management System)
- Rehabilitation Management Plan
- Mine Closure Plan
- Community Consultative Committee

Additionally, the conditions of approval require the Applicant to establish a community consultative committee with representation from Council and provide a copy of the Audit Report to Council.

Council would expect that the audit will include evidence to support the compliance status of these conditions of approval, and of interest to council, evidence to support the following:

- The extent to which development contributions made under either a Planning Agreement or Contributions Plan have been made;
- The extent of consultation with council on transport conditions, particularly in relation to transfer of ownership and subdivision to support completion of the works;
- Mine closure planning to achieve the objectives set out in Table 13 of the consents;
- In particular, the extent to which the applicant intends to *minimise adverse socio-economic impacts associated with mine closure*;

- Compliance with requirements of any OSSM approval; and
- Whether the various rehabilitation management and closure planning objectives/ plans/ strategies required under the various consents align to local, regional and State strategic land use planning documents, including whether these documents incorporate final land use outcomes consistent with these strategic land use planning documents.

I would like to thank you for the opportunity to provide comment on scope for the Mount Thorley Warkworth Independent Environmental Audit. Should you have any questions or comments, please contact Mary-Anne Crawford, Manager Development and Environmental Services on 02 6578 7290.

Yours faithfully



Mary-Anne Crawford
Manager Development and Environmental Services

Lead Auditor CV

Appendix E

KEN HOLMES

Senior Principal Environmental Consultant



Contact

Email ken@baeckea.com.au

Mobile +61 0438 046 261

Qualifications & professional affiliations

- Bachelor of Science (Industrial Chemistry)
- Master of Applied Science (Waste Management)
- Master of Business Administration (MBA)
- Accredited Lead Environmental Auditor (Exemplar Global #: 14065)

Ken Holmes is an acknowledged industry leader in environmental management, impact assessment and project approvals. His career spans over 30 years and includes experience across Australia, Africa, Europe and South-east Asia.

Ken's extensive Environmental Audit, Infrastructure Planning and Approvals experience includes that preparation of environmental impact statements for major projects, pre-construction approvals, and operations environmental management experience.

He has led large scale projects on major road, rail, renewable energy, mining and water infrastructure projects across Australia. The projects presented below are a sample of the range and complexity of projects that Ken has delivered.

Project experience

Environmental Auditing (Audits completed in the recent years)

Mt Thorley / Warkworth Mine IEA (2023)- Ken led the independent environmental audit of environmental compliance audit of the this large mining complex located in the Hunter Valley, NSW. The conditions of approval for the mine requires a three-yearly independent environmental audit of compliance against:

- DP&E Conditions of Approval / Development Approvals;
- Commonwealth Approvals;
- Water Licences;
- Environment Protection Licences;
- Mining Leases;

The independent environmental audit was undertaken in accordance with AS/NZS ISO 19011:2014 and the Department of Planning and NSW EPA audit guidelines.

In addition to his role as lead auditor managing a multidisciplinary team, Ken covered the role as technical expert in air quality and noise management.

Hunter Power Project (Construction Phase IEA 2022 - 2025)- Ken has been commissioned to undertake the construction phase independent environmental audits on the Hunter Power Project. The Hunter Power Project is the construction of a new gas fired power station located in the Hunter Valley in NSW. The conditions of approval for the mine requires a three-yearly independent environmental audit of compliance against:

- DP&E Conditions of Approval / Development Approvals;
- Commonwealth Approvals;
- Environment Protection Licence;

The independent environmental audit are being undertaken undertaken in accordance with AS/NZS ISO 19011:2014 and the Department of Planning and NSW EPA audit guidelines.

As auditor, Ken's role covers all technical areas including construction management, waste, greenhouse gas, surface water management, air quality and noise management.

Hera Gold Mine (2019 and 2023)- Ken led the independent environmental audits for the environmental compliance audit of the Hera Gold Mine in western NSW. The conditions of approval for the mine requires a three-yearly independent environmental audit of compliance against:

- DP&E Conditions of Approval / Development Approvals;
- Commonwealth Approvals;
- Water Licences;
- Environment Protection Licences;
- Mining Leases; and the
- EIS (Statement of Commitments).

The independent environmental audit was undertaken in accordance with AS/NZS ISO 19011:2014 and the Department of Planning and NSW EPA audit guidelines.

In addition to his role as lead auditor managing a multidisciplinary team, Ken covered the role as technical expert in surface water management, air quality and noise management.

Bingo Industries Eastern Creek Resource Recovery Facility and Landfill (2022) - Ken led the environmental compliance audit of Bingo's Resource Recovery Facility and Landfill located in western Sydney. The conditions of project's Planning Approval requires a three-yearly independent environmental audit of compliance against:

- DP&E (NSW) Conditions of Approval / Development Approvals;
- Environment Protection Licence.

The Audit also included an odour audit and surface water audits undertaken by specialists within the audit team.

The independent environmental audit was undertaken in accordance with AS/NZS ISO 19011:2014 and the Department of Planning and NSW EPA audit guidelines and the EPBC element of the audit against the DAWE Audit Guidelines.

In addition to his role as lead auditor managing a multidisciplinary team, Ken covered the role as technical expert in air quality and noise management.

McArthur River Mine (Northern Territory) (2022) - Ken is currently leading the environmental compliance audit of McArthur River Mine in the Cape of Carpentaria, NT. EPBC Approval requires an annual independent environmental audit of compliance against that Approval.

The independent environmental audit is being undertaken in accordance with AS/NZS ISO 19011:2014 and the DAWE Audit Guidelines.

Moolarben Coal Mine (2022) - Ken led the environmental compliance audit of Moolarben Coal Mine located near Mudgee in Western NSW. The conditions of project's Planning Approval requires a three-yearly independent environmental audit of compliance against:

- EPBC Approval
- DP&E (NSW) Conditions of Approval / Development Approvals;
- Water Licences;
- Environment Protection Licence; and all
- Mining Leases.

The independent environmental audit was undertaken in accordance with AS/NZS ISO 19011:2014 and the Department of Planning and NSW EPA audit guidelines and the EPBC element of the audit against the DAWE Audit Guidelines.

In addition to his role as lead auditor managing a multidisciplinary team, Ken covered the role as technical expert in surface water management, air quality and noise management.

Bingo Industries Mortdale Resource Recovery Facility (2022) - Ken undertook the environmental compliance audit of waste recycling plant and transfer station located in Mortdale, NSW. The conditions of project's Planning Approval requires a three-yearly independent environmental audit of compliance against:

- DP&E (NSW) Conditions of Approval / Development Approvals;
- Environment Protection Licence.

The independent environmental audit was undertaken in accordance with AS/NZS ISO 19011:2014 and the Department of Planning and NSW EPA audit guidelines and the EPBC element of the audit against the DAWE Audit Guidelines.

Martin Place Over Station Development (2020 – ongoing series of annual independent audits to 2024) - Ken is currently undertaking the environmental compliance audits of this landmark construction project in the Sydney CBD. The conditions of project's Planning Approval requires annual independent environmental audit of compliance against the DP&E (NSW) Conditions of Approval. The project is part of the development of Sydney's commuter rail network expansion.

Client: Port Waratah Coal Loader (2018 and 2021)- Ken was the lead auditor for the last two independent environmental compliance audits of the Port Waratah Coal Loader located on Kooragang Island near Newcastle. The conditions of approval for the facility requires a three-yearly independent environmental audit of compliance against:

- DP&E Conditions of Approval / Development Approvals;
- Water Licences;
- Environment Protection Licence; and the
- EIS (Statement of Commitments).

These independent environmental audit were undertaken in accordance with AS/NZS ISO 19011:2014 and the Department of Planning and NSW EPA audit guidelines.

In addition to his role as lead auditor managing a multidisciplinary team, Ken covered the role as technical expert in surface water, air quality and noise management.

North Parkes Mine (2021)- Ken was the lead auditor for the environmental compliance audit of the Tritton Gold Mine in western NSW. The conditions of approval for the mine requires a three-yearly independent environmental audit of compliance against:

- DP&E Conditions of Approval / Development Approvals;
- Water Licences;
- Environment Protection Licence;
- Mining Leases; and the
- EIS (Statement of Commitments).

The independent environmental audit was undertaken in accordance with AS/NZS ISO 19011:2014 and the Department of Planning and NSW EPA audit guidelines.

Metropolitan Coal Mine (2018 and 2021)

Ken was the independent environmental auditor for the last two independent environmental compliance audits of the Metropolitan Coal Mine south of Sydney, NSW. These conditions of approval for the mine requires a three-yearly independent environmental audit of compliance against:

- DP&E Conditions of Approval / Development Approvals;
- Commonwealth Approvals;
- Water Licences;
- Environment Protection Licences;
- Mining Leases; and the
- EIS (Statement of Commitments).

The independent environmental audit was undertaken in accordance with AS/NZS ISO 19011:2014 and the Department of Planning and NSW EPA audit guidelines

In addition to his role as lead auditor managing a multidisciplinary team, Ken covered the role as technical expert in surface water management (covering the mine infrastructure areas), air quality and noise management.

Stratford and Duralie Coal Mines – (2020) Ken was the lead auditor for the environmental compliance audit of Ashton Coal Mine in the Hunter Valley. The conditions of approval for the mine requires a three-yearly independent environmental audit of compliance against:

- DP&E Conditions of Approval / Development Approvals;
- Water Licences;
- Environment Protection Licence;
- Mining Leases and the
- EIS (Statement of Commitments).

The independent environmental audit was undertaken in accordance with AS/NZS ISO 19011:2014 and the Department of Planning and NSW EPA audit guidelines.

Ashton Coal Mine (2020) - Ken was the lead auditor for the environmental compliance audit of Ashton Coal Mine in the Hunter Valley. The conditions of approval for the mine requires a three-yearly independent environmental audit of compliance against:

- DP&E Conditions of Approval / Development Approvals;
- EPBC Approvals;
- Water Licences;
- Environment Protection Licence;
- Mining Leases; and the
- EIS (Statement of Commitments).

The independent environmental audit was undertaken in accordance with AS/NZS ISO 19011:2014 and the Department of Planning and NSW EPA audit guidelines.

Newcastle Coal Infrastructure Group (2019 and 2022) - Ken was the lead auditor for the environmental compliance audits of the NCIG Coal Loader located on Kooragang Island near Newcastle. The conditions of approval for the mine requires a three-yearly independent environmental audit of compliance against:

- DP&E Conditions of Approval / Development Approvals;
- EPBC Approvals;
- Water Licences;
- Environment Protection Licence; and the
- EIS (Statement of Commitments).

The independent environmental audit was undertaken in accordance with AS/NZS ISO 19011:2014 and the Department of Planning and NSW EPA audit guidelines.

Kables Sand Quarry EPBC Audit (2019) – Ken was the auditor for the EPBC audit of Hansons Kables Sand Quarry located in the Blue Mountains in NSW. The audit was a requirement of the project EPBC approval and was undertaken in accordance with the DAWE Audit Guidelines.

Benedicts Recycling Mayfield) (2019)- Ken was the lead auditor for the environmental compliance audit of the Benedicts waste facility in Newcastle. The conditions of approval for the mine requires a three-yearly independent environmental audit of compliance against:

- DP&E Conditions of Approval / Development Approvals;
- Environment Protection Licence; and the
- EIS (Statement of Commitments).

The independent environmental audit was undertaken in accordance with AS/NZS ISO 19011:2014 and the Department of Planning and NSW EPA audit guidelines.

Triton Copper Mine (2018) - Ken was the lead auditor for the environmental compliance audit of the Triton Gold Mine in western NSW. The conditions of approval for the mine requires a three-yearly independent environmental audit of compliance against:

- DP&E Conditions of Approval / Development Approvals;
- Water Licences;
- Environment Protection Licence;
- Mining Leases; and the
- EIS (Statement of Commitments).

The independent environmental audit was undertaken in accordance with AS/NZS ISO 19011:2014 and the Department of Planning and NSW EPA audit guidelines.

Oberon Quarries (2019) - Ken was the lead auditor for the environmental compliance audit of this Gravel Quarry located in near Oberon in western NSW. The conditions of approval for the quarry requires a three-yearly independent environmental audit of compliance against:

- DP&E Conditions of Approval / Development Approvals;
- Environment Protection Licence; and the
- EIS (Statement of Commitments).

The independent environmental audit was undertaken in accordance with AS/NZS ISO 19011:2014 and the Department of Planning and NSW EPA audit guidelines.

Sibelco Dunes Sand Mine (2018 / 2019) – Ken was the auditor for the environmental compliance audit of the Sibelco Sand located near Nelson Bay in NSW. The conditions of approval for the mine required an independent environmental audit of against:

- DP&E Conditions of Approval / Development Approvals;
- EIS predications against actual impacts.

The Approval required that the audit be conducted within 12 months of completion of mining and focussed on mine site rehabilitation.

The independent environmental audit was undertaken in accordance with AS/NZS ISO 19011:2014 and the Department of Planning and NSW EPA audit guidelines

Ardglen Quarry (Daracon) (2018) - Ken was the lead auditor for the environmental compliance audit of the Ardglen Gravel Quarry located in the upper Hunter Valley. The conditions of approval for the quarry requires a three-yearly independent environmental audit of compliance against:

- DP&E Conditions of Approval / Development Approvals;
- Environment Protection Licence; and the
- EIS (Statement of Commitments).

The independent environmental audit was undertaken in accordance with AS/NZS ISO 19011:2014 and the Department of Planning and NSW EPA audit guidelines.

Holcim Hume Quarry (2017/8) - Ken was auditor for the environmental compliance audit of Holcim' hard rock quarry located near Queanbeyan in NSW. Ken undertook the compliance audits of the quarry's Conditions of Approval. The conditions of approval required a detailed assessment of compliance against:

- DP&E Conditions of Approval / Development Approvals
- Water Licences
- Environment Protection Licences.

The independent environmental audit was undertaken in accordance with AS/NZS ISO 19011:2014 and the Department of Planning and NSW EPA audit guidelines.

PGH Bricks (2017/8) - Ken was the lead auditor for the environmental compliance audits of PGH's NSW, QLD, Vic and SA quarries. Ken undertook the compliance audits of the quarries as required by the Conditions of Approval for each site. The conditions of approval required a detailed assessment of compliance against:

- DP&E Conditions of Approval / Development Approvals (for non-NSW sites)
- Mining (and Exploration) Leases
- Environment Protection Licences (or equivalent)

Enviroking (2017/8) - Ken was the lead auditor for an independent environmental audit undertaken in accordance with AS/NZS ISO 19011:2014 "Guidelines for auditing management systems" for the liquid waste facility. The audit reviewed Enviroking's compliance with conditions of approval, made recommendations to address non-compliances and identified opportunities for improvement in the project's environmental management and performance.

Ken has also undertaken compliance audits for a wide range of industries and projects including:

- Cowal Gold Mine
- Manildra Limited / Castlereagh Coal
- Bougainville Copper Limited (Bougainville, PNG)
- News Limited
- Fairfax News Papers
- Norske Skog
- Alcoa
- Ok Tedi Mining (PNG)
- Albright & Wilson
- Seafood Specialities
- Rio Tinto
- Hunter Water
- Department of Foreign Affairs and Trade
- Sydney Water
- Transport for NSW
- Mount Isa Mines
- Scott Transport
- Roads and Traffic Authority (now Roads and Maritime Services)
- AbiGroup (now LendLease)
- Leighton Contractors (now CPB Contractors)
- John Holland Group
- Queensland Transport
- PMP (Printing)
- Straits Resources
- Mount Isa Mines
- Philips (electronics)
- Bonlac Foods
- BHP

Ken has also led a wide range of Acquisition / Due Diligence audits for private sector clients in Australia, PNG, Africa, South Pacific, New Zealand, China, Singapore, Indonesia, Thailand.

Project Approvals

Central Station Re-development – Transport for NSW - Ken led the team responsible for gaining the environmental approvals (preparation of EMPs /construction licences etc.) for the Sydney Central Station project. In this role, Ken was responsible for the interpretation of the Approval requirements (Minister's Conditions of Approval) and the provision of strategic advice on the approvals, licencing, construction environmental management and stakeholder management.

Sydney Metro – Transport for NSW - Transport for NSW (TfNSW) commissioned two demolition contractors to demolish a number of multistorey buildings within the Sydney CBD in preparation for the construction of the Sydney Metro project. Ken led the team responsible for the preparation of environmental management plans for these works (TfNSW was not comfortable that the demolition contractors had the appropriate skills to prepare the required plans and gain the required approvals for the works). Ken worked with the demolition contractors to streamline their internal management processes and to add the requisite environmental management functions within both their corporate and project management systems.

M2 Widening Project Approvals (Roads and Maritime Services) – Ken (Project Manager) led the environmental approvals team for the preparation of the Environmental

Impact Assessment and construction approvals (preparation of EMPs /construction licence etc.) for the M2 widening project.

The management and minimisation of vegetation clearing on this project (along with the minimisation of impacts on residents) a high priority. Ken oversaw all the specialist studies that supported the preparation of the Environmental Impact Assessment and subsequent Environmental Management Plans, including:

- o Ecological survey;
- o Tree reports;
- o Noise and vibration impact assessments;
- o Contamination assessments;
- o Traffic impact assessments; and
- o Ground and surface water impact assessments.

Sydney Light Rail – Acciona / Transport for NSW - Ken led the team responsible for leading the construction approvals program and setting up the environmental management system for this significant brown fields infrastructure construction project. His responsibilities included:

- o Establishing the project Environmental Management System;
- o Interpreting the Conditions of Approval and the Project Deed and advising the Acciona management team on all aspects of compliance with those key approval and contractual documents;
- o Gaining the construction environmental approvals (preparation of EMPs /construction licences etc.) for the Sydney Light Rail project. In this role, Ken provided strategic advice on the approvals, licencing, construction environmental management and stakeholder management. He was also responsible for all internal (Acciona / KMH) document quality control.
- o Selecting, commissioning and supervising the wide range of specialist environment service providers including ecological survey, tree reports, and pre-construction vegetation clearance reports.
- o Advising the design and construction teams on tree clearing and management and integration of construction requirements into the flora and fauna management plans.

Ken also led the consultation with the NSW Government regulators and supported and mentored the Acciona Construction Environmental Manager. In addition, Ken personally led the community and business reference group consultation process on behalf of the design and construction joint venture, successfully gaining signoff from these consultation bodies on the environmental plans and strategies.

Environmental Management Representative (ER) - The role of Independent Environmental Representative on major infrastructure projects in NSW was established in 1998 and continues to be a requirement of the Conditions of Approval for all major infrastructure projects in NSW. The appointees are nominated by the project proponent or construction consortium but are approved by and report to the Director General of the Department of Planning and Environment (DPE).

The scope of the ER's role is broad range and includes:

- o Interpreting and advising on requirements of the Project Approval.
- o Reviewing and assessing the performance of the project against the Conditions of Approval, Project Deed and other relevant project related approvals. In that role, the ER reviews and approves all environmental related plans (EMPs), audits the implementation of environmental management plans and strategies, verifies (through audit and surveillance) compliance with the relevant project approval and project deed requirements, monitors and reports on regulatory compliance and provides reports to the Department and the project proponent on these matters.
- o Reports on compliance related issues to the public and investigates environmental and compliance issues, complaints and incidents.
- o Review and approval of vegetation clearing and other high (environmentally) impact activities.

Ken has fulfilled the role of Independent Representative on seven major infrastructure projects:

- o Hunter Expressway (Motorway construction, Hunter Valley) - (2011 – 2013)
- o Integral Energy 9JA Project (Transmission Line Construction Western Sydney) - (2006-2007)
- o Westlink M7 (40km Motorway project, Western Sydney) - (2003-2005)
- o Towra Beach Nourishment Project (Wet land protection, dredging project, Botany Bay) - (2004)
- o Warragamba Dam Auxiliary Spillway Project- (1998 – 2013)
- o Cronulla Sewage Treatment Plant Upgrade – (1998 – 2000)
- o Liverpool Sewage Treatment Plant Upgrade – (2000)

Upper Hunter Valley Alliance (UHVA) – Leighton Contractors /ARTC - Ken led the team responsible for the provision of the environmental approvals (preparation of EMPs /construction licences etc.) on this major ARTC rail infrastructure program in the Hunter Valley of New South Wales. Ken's team on this project provided the entire environment and community and stakeholder team as a Sub-Alliance partner. In this role, Ken provides strategic advice on the approvals, licencing, construction environmental management and stakeholder management. His responsibilities included:

- o Establishing the project Environmental Management System;
- o Interpreting the Conditions of Approval and the Project Deed and advising the Leighton management team on all aspects of compliance with those key approval and contractual documents;
- o Gaining the construction environmental approvals (preparation of EMPs /construction licences etc.) for range of projects delivered by the Alliance. In this role, Ken provided strategic advice on the approvals, licencing, construction environmental management and stakeholder management. He was also responsible for all internal document quality control.
- o Selecting, commissioning and supervising the wide range of specialist environment service providers

including ecological survey, tree reports, and pre-construction vegetation clearance reports.

- Advising the design and construction teams on tree clearing and management and integration of construction requirements into the flora and fauna management plans.

Other relevant Infrastructure Projects led by Ken include:

- Joint Defence Headquarter Construction Project (ACT) – Environment Approvals Manager
- Melbourne Desalination Plant Project – EMP preparation
- Ballina Bypass (Pacific Highway construction project) - Environment Approvals Manager
- Northern Hume Alliance (Hume Highway Duplication) - Environment Approvals and Community Manager
- Anvil Hill Coal Mine (Hunter Valley) - Environment Approvals Manager
- Shannon Creek Dam Construction Project - Environment Approvals and Community Manager
- Liverpool to Ashfield Pipeline Project (Sydney Water) - Environmental Approvals Manager
- Networks Alliance (Sydney Water –water and sewage mains renewals project) – KMH Management Representative
- Technical Reviewer and Economic Impact Analyst – DEC Construction Noise Management Guidelines (2006)
- Northwest Transit Way - Environment Approvals Manager
- Lane Cove Tunnel - Environment Advisor to Approvals and Construction Team
- North Connex – Environmental Management Plan preparation, consistency assessments and preparation of Environmental Impact Assessments to support variations to the project approvals
- Sydney Desal Plant -Internal QA Reviewer
- Keepit Dam Safety Upgrade – Project Director
- Cordeaux Water Treatment Plant – Lead Consultant and Project Manager

Investigative / Expert Roles

Minter Ellison – Expert Opinion / Report (2018/9) - Ken was commissioned by Minter Ellison on behalf of their client (a consortium of major construction contractors) to provide an expert opinion regarding the interpretation of impact of changes to the Conditions of Approval for a major Sydney linear infrastructure project on environmental investigation and reporting obligations and project cost impacts. This expert opinion was commissioned to support the resolution of a contractual dispute between the consortium and their client.

Environment Protection Authority — Investigation of Illegal Land Clearing and Waste Disposal Activities (April 2015 – July 2017) - Ken was the lead auditor for the investigations undertaken by the KMH team commissioned by Barnett & May

the NSW Environment Protection Authority (EPA) to investigate an alleged illegal vegetation clearing and waste disposal operations located in the Hunter Valley, Hawkesbury River Basin and Arcadia (north western Sydney). Ken developed and supervised the implementation site investigation strategies that included a series of investigative processes designed to identify the location and extent of vegetation clearing, and to determine the depth and volumes of buried construction and demolition wastes.

Environment Protection Authority — Expert Reports Illegal Land Clearing and Waste Disposal Activities (2018)

- Ken was commissioned by the NSW Environment Protection Authority (EPA) to provide expert opinion regarding the alleged illegal vegetation clearing and waste disposal at a site in the Hawkesbury River Basin and Arcadia (north western Sydney).

Ken was subsequently briefed to provide expert opinion in the legal actions taken by the EPA in these matters.

Qenos Mandatory Environmental Audit - Ken was commissioned as the Expert Independent Environmental Auditor (Lead Auditor) for the Qenos Mandatory Audit. As a result of a series of environmental incidents, Qenos were required by the NSW EPA to commission an independent auditor to determine if the plant is capable of being operated and maintained and if the plant is being competently operated and maintained, in order to minimise the risk of environmental incidents and better protect the environment.

In doing this, the audit Assessed the:

- adequacy of Risk Assessment procedures and practices
- adequacy of maintenance and operational Systems
- physical condition and reliability of the Plant
- adequacy and suitability of environmental risk management
- adequacy and suitability of performance monitoring equipment
- processes and procedures for identifying and rectifying plant and equipment issues.

Incidents and assessed of the adequacy the investigations and responses to those incidents.

Orica Port Botany Ground Water Remediation Project – Expert Auditor - Ken was the lead auditor for the independent compliance audit of the Orica groundwater remediation project. These annual audits were a condition of licence established by the (then) Department of Environment and Climate Change and the Department of Planning.

Other

Kelian Equatorial Mining (Kalimantan, Indonesia) - Ken led a specialist environmental and social impact audit team that was established by Rio Tinto (and approved by the Government) to investigate and report on the environmental and social impacts associated with alluvial mining operations (downstream) from the Rio Tinto (major owner) operated gold mine located in the remote, mountainous region of Kalimantan. The audit team included Government representatives and was undertaken to address the concerns of local village communities that were being impacted socially and economically.

Bougainville Copper Limited (Bougainville, PNG) - Ken led two specialist projects for Bougainville Copper Limited. Including Investigation of the Loloho Port Facility on Bougainville Island. Ken led the investigation team commissioned to identify and plan for the clean-up of hazardous chemicals left after BCL evacuated Bougainville at the commencement of the civil war in 1990. The investigation covered gases, PCBs, and minerals processing chemicals. The second project was clean up and destruction of chlorine and other compressed gases located at the Loloho Port facility on Bougainville Island.

Ken subsequently led a team dispatched to Bougainville to chemically destroy 1 tonne of chlorine and other toxic gases. The team built a treatment plant on site and successfully removed the toxic gas threat.

Waste Management

Review of Energy to Waste Technologies – Client Confidential (Australian Based Waste Management Company)

Ken participated (as technical reviewer) in the preparation of a technical review of energy to waste technologies for a major waste management group operating in Australia. The purpose of the review has to provide the client with a detailed assessment of all available and emerging energy to waste technologies available including determining the barriers to implementation within the Australian market, political and social framework.

Shredder Waste Disposal Assessment – Sims Metal

Metal shredders produce a complex waste stream consisting of a mixture of plastic, rubber, metal and other materials that is costly to dispose of. Ken led the KMH team that researched the options for management of this waste stream and prepared recommendations for the development of waste treatment and disposal options (including energy extraction) for Sims Metal.