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Sent via Major Projects Portal only

27/07/2023

Dear Miss Lane

**Mt Pleasant Coal Mine (DA92/97)  
2023 Independent Environmental Audit**

Reference is made to the 2023 Independent Environmental Audit (IEA) report and Response to Audit Recommendations (RAR) for Mt Pleasant Coal Mine, submitted as required by Schedule 5 condition 9 of development consent DA92/97, as modified (the consent) to the Department of Planning and Environment (the department) on 5 May 2023.

The department considers the IEA report to generally satisfy the reporting requirements of the approval. Please note that acceptance of this report is not an endorsement of the compliance status of the project.

Non-compliances identified in the IEA have been assessed in accordance with the department's Compliance Policy with the department on this occasion, determining to record the breaches with no further enforcement action. However, please note that recording the breach does not preclude the department from taking alternative enforcement action, should it become apparent that an alternative response is more appropriate.

Please include a status update for all actions provided in the RAR in the next Annual Review until all actions are completed.

Should you wish to discuss the matter further, please contact Jennifer Sage, Senior Compliance Officer, on 0400 245 170 or email to [compliance@planning.nsw.gov.au](mailto:compliance@planning.nsw.gov.au)

Yours sincerely

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

Heidi Watters  
Team Leader Northern  
Compliance

As nominee of the Planning Secretary

# **Mount Pleasant Operations**

## **Independent Environmental Audit 2023**

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Prepared for Mach Energy Pty Ltd

May 2023

# Mount Pleasant Operations

## Independent Environmental Audit 2023

Mach Energy Pty Ltd

E220173 RP1

May 2023

Version	Date	Prepared by	Approved by	Comments
v1	5 May 2023	Samantha Hayes	Thomas Frankham	Final

Approved by



**Thomas Frankham**

Associate Environmental Scientist (Lead Auditor Certification No. 207528)

5 May 2023

Level 3 175 Scott Street

Newcastle NSW 2300

This report has been prepared in accordance with the brief provided by Mach Energy Pty Ltd and has relied upon the information collected at the time and under the conditions specified in the report. All findings, conclusions or recommendations contained in the report are based on the aforementioned circumstances. The report is for the use of Mach Energy Pty Ltd and no responsibility will be taken for its use by other parties. Mach Energy Pty Ltd may, at its discretion, use the report to inform regulators and the public.

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# 1 Introduction

## 1.1 Background

The Mount Pleasant Operation (MPO) is located in the Upper Hunter Valley of New South Wales (NSW), approximately 3 kilometres (km) north-west of Muswellbrook and approximately 50 km north-west of Singleton (Figure 1.1). The villages of Aberdeen and locality of Kayuga are also located approximately 5 km north-northeast and 1 km north of the MPO boundary.

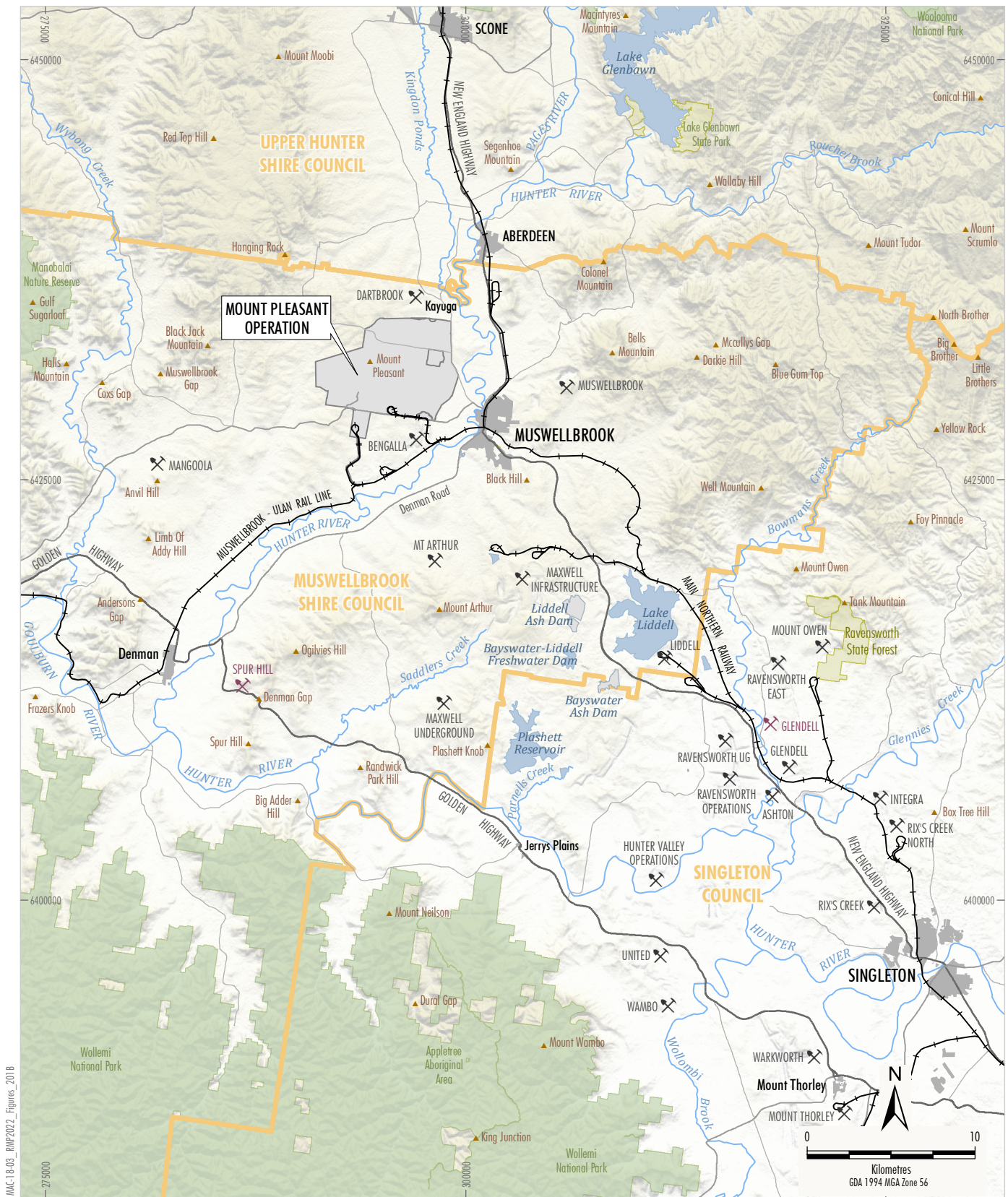
MACH Energy Australia Pty Ltd (MACH Energy) purchased the MPO from Coal & Allied Operations Pty Ltd (Coal & Allied) in 2016. MACH Mount Pleasant Operations Pty Ltd is the manager of the MPO on behalf of the unincorporated Mount Pleasant Joint Venture between MACH Energy (95% owner) and J.C.D. Australia Pty Ltd (5% owner).

On 22 December 1999, development consent DA 92/97 was approved by the then Minister for Urban Affairs and Planning for the construction and operation of an open cut coal mine, coal preparation plant, transport and rail loading facilities and associated facilities by Coal & Allied. The consent allowed for 24 hours per day, seven days per week operation and the extraction of 197 million tonnes (Mt) of run-of-mine (ROM) coal over a 21 year period, at a rate of up to 10.5 Mt of ROM coal per year.

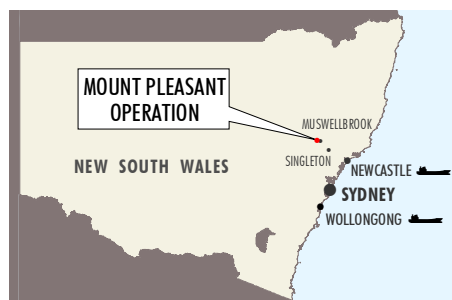
There have been five modifications to development consent DA 92/97 including:

- Modification 1 (MOD 1) – approved on 19 September 2011. MOD 1 included the provision of an infrastructure envelope for siting the mine infrastructure, the provision of an optional conveyor/service corridor linking the MPO facilities with the Muswellbrook-Ulan Rail Line and modification of the existing consent boundaries to accommodate the optional conveyor/service corridor and minor administrative changes.
- Modification 2 (MOD 2) – approved on 29 March 2017. MOD 2 proposed to realign an indicative internal haul road to enable more efficient access to the South Pit open cut.
- Modification 3 (MOD 3) – approved on 24 August 2018. MOD 3 comprised an extension to the time limit on mining operations (to 22 December 2026) and extensions to the South Pit Eastern Out of Pit Emplacement to facilitate development of an improved final landform.
- Modification 4 (MOD 4) – approved on 16 November 2018. MOD 4 included:
  - duplication of the approved rail spur, rail loop, conveyor and rail load-out facility and associated services
  - duplication of the Hunter River water supply pump station, water pipeline and associated electricity supply that followed the original rail spur alignment
  - demolition and removal of the redundant approved infrastructure within the extent of the Bengalla Mine, once the new rail, product loading and water supply infrastructure has been commissioned and is fully operational.
- Modification 5 (MOD 5) – approved 29 June 2022. MOD 5 included the amendment of an administrative error to the schedule of lands to allow the construction of the DW1 controlled release dam and associated pipeline.

The layout of MPO is illustrated on Figure 1.2.



MAC18-03\_RMP2022\_Figures\_2018



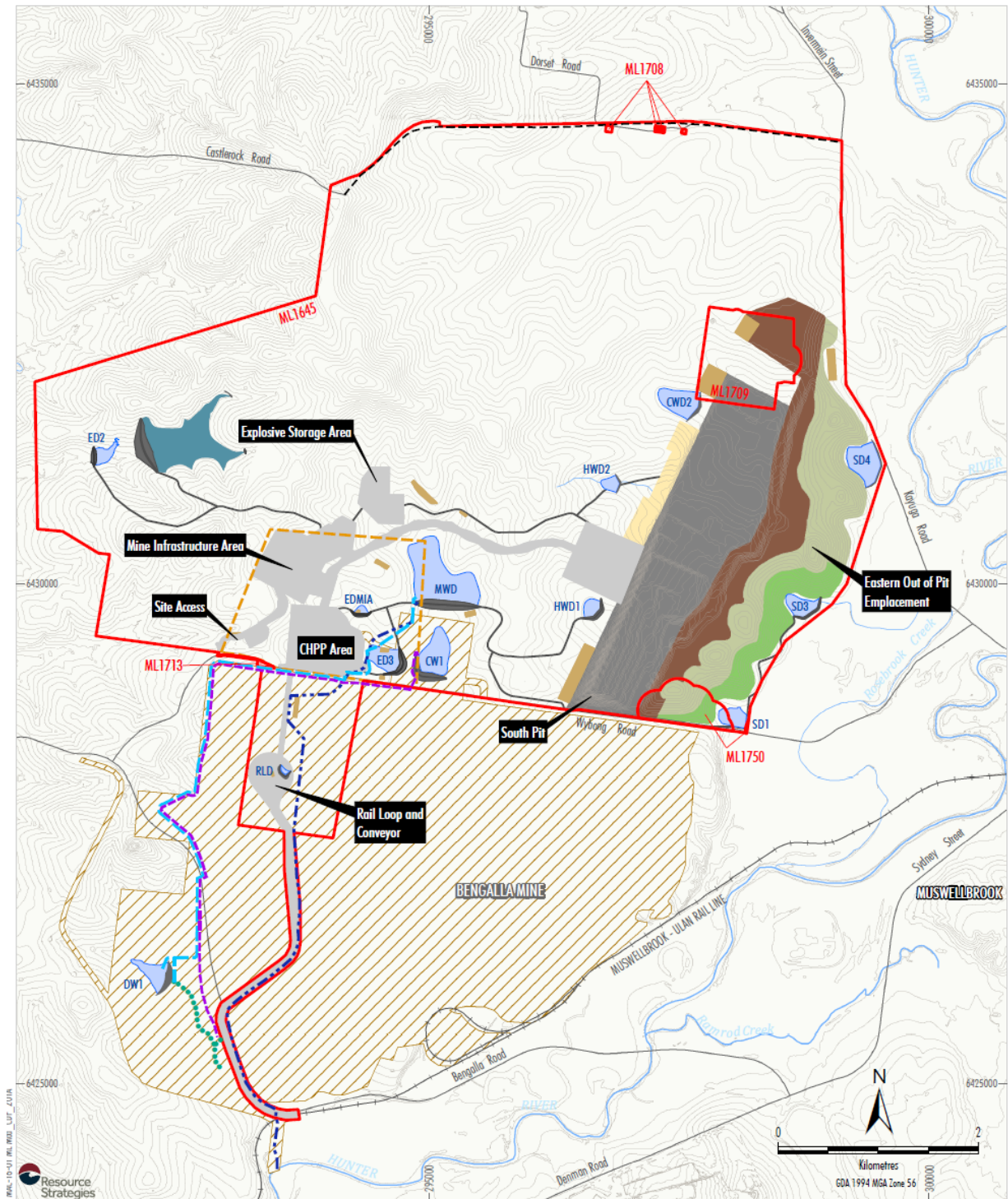
- LEGEND**
- Mining Operation
  - Proposed Mining Operations (Application Lodged)
  - Railway
  - Local Government Boundary
  - State Forest/Reserve
  - National Parks and Wildlife Estate
  - Coal I- Current Titles

Date prepared: 29-07-2022

**MACHEnergy**  
MOUNT PLEASANT COAL MINE  
REHABILITATION MANAGEMENT PLAN 2022

Figure 1.1: Regional location





- LEGEND**
- Mining Lease Boundary
  - Bengalla Mine Approved Disturbance Boundary (SSD-5170)
  - Infrastructure Area Envelope
  - Active Stripping Area
  - Active Mining Area
  - Active Overburden Emplacement Area
  - Topsoil Stockpile
  - Initial Rehabilitation
  - Established Rehabilitation
  - Infrastructure and Borrow/Stockpile Area
  - Access Road
  - Northern Link Road
  - Indicative Water Pipeline Alignment
  - MPO Hunter River Supply Pipeline
  - MPO DW1 Pipeline (Bi-directional)
  - Bengalla Mine CW1 Pipeline
  - Approximate Extent of Scour Protection
  - Water Dam
  - Fines Emplacement Area

Source: NSW Land & Property Information (2017); NSW Division of Resources & Energy (2017); MACH Energy (2017)

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MOUNT PLEASANT OPERATION

Figure 1.2: Site layout

## 1.2 Audit team

The Independent Environmental Audit (IEA) team includes the team detailed in Table 1.1.

**Table 1.1** IEA team

Name	Role	Company	Qualifications	Experience
Thomas Frankham	Lead auditor (Lead Auditor Certification No. 207528)	EMM	BEnvSc, Certified Lead Environmental Auditor (Exemplar Global - Certification No. 207528)	Associate Consultant 11 years' experience
Samantha Hayes	Assistant auditor	EMM	BDevStu (Environmental Sustainability), MEnvMgmt	Senior Consultant 8 years' experience
Bret Jenkins	Strategic advisor	EMM	Mine surveyor, Member of EIANZ)	Associate Director 35 years' experience
Francine Manansala	Air quality and greenhouse gas emissions technical expert	EMM	BArts (Resource and Environmental Management), CASANZ Certified Air Quality Professional	Associate Consultant 14 years' experience
Scott Fishwick	Air quality and greenhouse gas emissions technical expert	EMM	BSc (Atmospheric Science)	National Technical Leader for Air Quality 17 years' experience
Nathan Garvey	Biodiversity management and offsetting technical expert	EMM	BSc, GDip (Biological Science), BAM Accredited Assessor	Associate Director 20 years' experience
Mark Bridges	Noise, blast and vibration technical expert	Bridges Acoustics	BMechEng MAAS	Principal Consultant 27 years' experience

## 1.3 Audit objectives

The objective of the IEA is to determine the operational compliance of MPO against the regulatory approvals (refer to Section 3.1) applicable to the site. The Audit findings are detailed in Chapter 3.

## 1.4 Audit scope

The IEA has been completed in accordance with Schedule 5, Condition 9 of development consent DA 92/97 which states:

1. By the end of March 2014, and every 3 years thereafter, unless the Secretary directs otherwise, the Applicant must commission, commence and pay the full cost of an Independent Environmental Audit of the development. This audit must:
  - a) be conducted by a suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Secretary;
  - b) include consultation with the relevant agencies and the CCC;
  - c) assess the environmental performance of the development and whether it is complying with the requirements in this consent and any relevant EPL or Mining Lease or necessary water licences (including any assessment, plan or program required under these approvals);

- d) review the adequacy of strategies, plans or programs required under the abovementioned approvals (including whether the development has met or is trended towards the progressive performance and completion criteria detailed in these strategies, plans or programs);
- e) if necessary, recommend appropriate measures or actions to improve the environmental performance of the development, and/or any strategy, plan or program required under the abovementioned approvals; and
- f) be conducted and reported to the satisfaction of the Secretary.

Notes:

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

2. Within 12 weeks of commencing any audit, or as otherwise agreed by the Secretary, the Applicant must submit a copy of the audit report to the Secretary and any other NSW Government agency that requests it, together with its response to any recommendations contained in the audit report and a timetable for the implementation of these recommendations, as required. The Applicant must implement the audit report recommendations, to the satisfaction of the Secretary.

The IEA has also been in accordance with Section 3.3. of the DPE's (May 2020) *Independent Audit – Post Approval Requirements*.

## 1.5 Audit period

The audit period for this IEA covers the period between 27 February 2020 to 8 March 2023. This represents the day after the 2020 IEA site inspection was completed, through to the final day of the 2023 IEA site inspection.



## 2 Audit methodology

### 2.1 Selection and endorsement of audit team

EMM consulting contacted DPE seeking endorsement of the proposed audit team as well as advice on technical experts specified by the Secretary. On 19 December 2022, DPE responded stating that the Secretary requires the audit team includes experts in the following fields:

- noise, blast and vibration
- air quality and greenhouse gas emissions
- biodiversity management and offsetting.

On 20 January 2023, the DPE formally endorsed the audit team detailed in Table 1.1. A copy of the Planning Secretary audit team endorsement is attached as Appendix B.

### 2.2 Audit scope development

The IEA scope was developed in accordance with the DPE's (May 2020) *Independent Audit – Post Approval Requirements*.

On 20 February 2023, EMM requested from DPE confirmation of any parties or agencies that are required to be consulted with as part of the IEA, or if there were any areas of compliance or environmental management that the DPE would like EMM to focus on within the scope of the IEA.

DPE Responded on 21 February 2023, with the list of agencies to consult with and aspects to focus on. These are discussed further in Section 3.8.

### 2.3 Compliance evaluation

Compliance of the operations of MPO were assessed against the approvals and documents listed in Section 3.1.

The process of compliance evaluation involved the following steps:

- review of all approvals applicable to MPO operations
- development of spreadsheet of all relevant conditions
- site visit including:
  - opening meeting with applicable site personnel
  - site inspections (Section 2.5)
  - interviews of relevant site personnel (Section 2.4)
  - closing meeting
- requesting additional information from site, where required
- review of all information provided by site, site photos taken during the site inspection (Appendix F) and any notes taken during the site inspection
- further discussions with site personnel, as required.

## 2.4 Site interviews

MPO site personnel interviewed as part of the IEA are included in Table 2.1.

**Table 2.1** MPO site personnel interviews

Name	Role
Andrew Reid	Environment superintendent
Mariah Lane	Environment advisor
Scott Grunsell	Environment advisor
Craig Hawkins	Project lead
Peter York	Environment and community superintendent

## 2.5 Site inspections

The site inspection of MPO was completed over two days on 7 and 8 March 2023. EMM consulting observed the following locations during the site inspection:

- mine infrastructure area (MIA)
- coal handling and preparation plant (CHPP) and associated infrastructure
- stage 1 rail infrastructure area
- stage 2 rail infrastructure
- active mining areas including South Pit, Central Pit and North Pit
- eastern out of pit emplacement area
- fines emplacement area
- sediment dams (SD) 1, 3, 8, 4 and 5
- water storages – ED2 and Mine Water Dam.

The site inspection was also attended by EMM's biodiversity management and offsetting technical specialist, Nathan Garvey, who completed his site inspection on 7 March 2023.

## 2.6 Consultation

Consultation was completed with various government agencies and the community consultative committee (CCC), including:

- Department of Planning and Environment (DPE)
- Biodiversity Conservation Division (BCD)
- DPE Water
- Environment Protection Authority (EPA)
- Department of Regional NSW – Mining, Exploration and Geoscience (MEG)
- Muswellbrook Shire Council (MSC)
- Department of Regional NSW – Resources Regulator
- all members of the CCC.

A summary of the consultation is included in Section 3.8, with evidence of consultation attached as Appendix C.

## 2.7 Compliance status descriptors

The compliance status of each compliance requirement in the audit table (Appendix A) has been determined using the relevant descriptors in Table 2.2.

**Table 2.2** Compliance status descriptors

Status	Description
Compliant	The auditor has collected sufficient verifiable evidence to demonstrate that all elements of the requirement have been complied with within the scope of the audit.
Non-compliant	The auditor has determined that one or more specific elements of the conditions or requirements have not been complied with within the scope of the audit.
Not triggered	A requirement has an activation or timing trigger that has not been met during the temporal scope of the audit being undertaken (may be a retrospective or future requirement), therefore an assessment of compliance is not relevant.

## 3 Audit findings

### 3.1 Approval and document list

The approvals and documents audited as part of this IEA include:

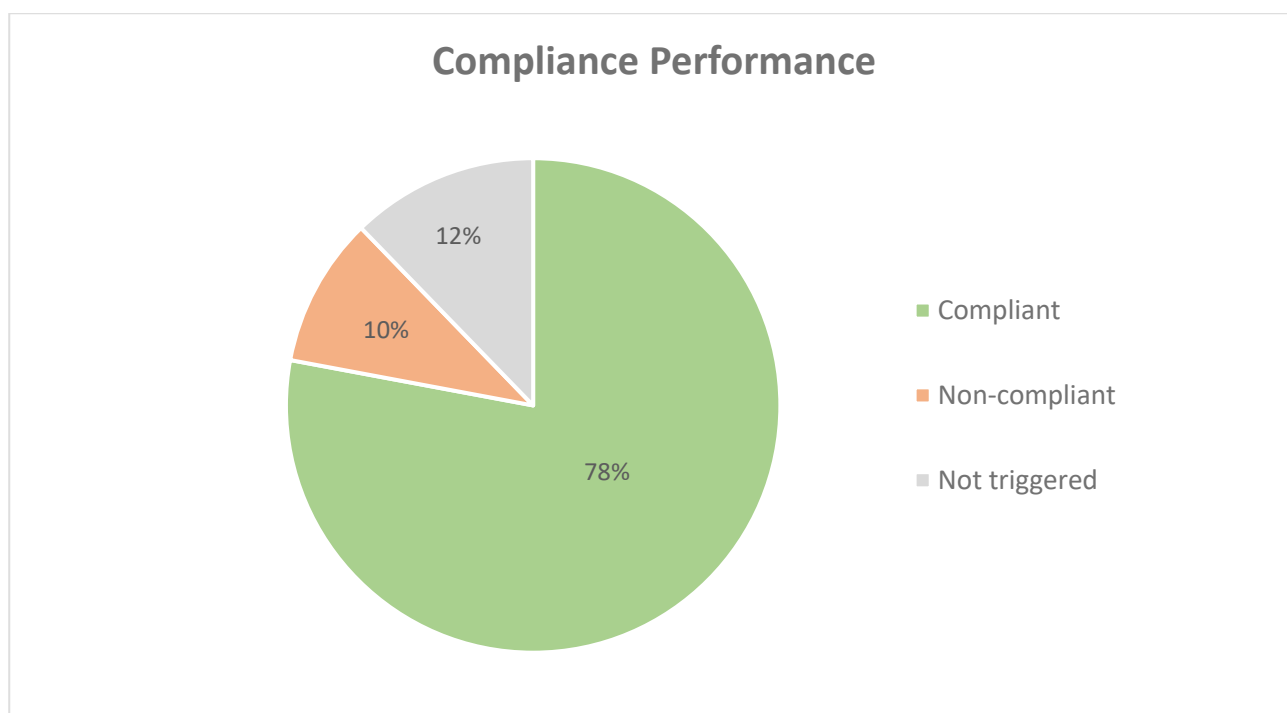
- Development Consent DA 92/97 and the statement of commitments
- Environment Protection Licence (EPL) 20850
- mining leases (ML) 1645, 1708, 1709, 1713, 1750 and 1808
- water licences
- Annual Reviews for 2020, 2021 and 2022
- environmental management plans (required under DA 92/97)
- non-compliances of the 2020 IEA.

### 3.2 Compliance performance

Table 3.1 list the total number of compliance requirements assessed as part of this IEA including the total number of compliant, non-compliant and not triggered conditions. Figure 3.1 shows the project performance in relation to compliance requirements assessed.

**Table 3.1** Compliance performance

Aspect	Number
Compliance requirements	204
Compliant	159
Non-compliant	20
Not triggered	25



**Figure 3.1** Compliance performance

### 3.3 Summary of agency notices, orders, penalty notices or prosecutions

Table 3.2 details the agency notices, orders, penalty notices or prosecutions received during the audit period.

**Table 3.2** Agency notices, orders, penalty notices or prosecutions

Date	Agency	Offence	Details	MPO response
22 January 2021	EPA	Breach of EPL 20850, Condition L3.1	Release of blast fume outside of the EPL licensed premises that caused harm to the comfort of a person.	Following the incident, MPO completed an investigation and reported the incident to the DPE and EPA. As a result of the investigation, the mining contractor amended key pre-blast procedures to reduce the potential for a similar event to occur in the future.
6 August 2021	Resources Regulator	Landform Targeted Assessment Program (TAP)	Identified MPO to have a leading practice in the construction quality assurance system for mine site rehabilitation.  Information release – <a href="https://www.resourcesregulator.nsw.gov.au/news-0/geomorphic-landform-establishment-at-mount-pleasant-operations">https://www.resourcesregulator.nsw.gov.au/news-0/geomorphic-landform-establishment-at-mount-pleasant-operations</a>	This information release did not require any follow up actions.



**Table 3.2**      **Agency notices, orders, penalty notices or prosecutions**

Date	Agency	Offence	Details	MPO response
27 August 2021	DPE	Breach of DA 92/97, Schedule 3, Condition 3	Sustained exceedance (measurements at 00:18 and 00:54) of the LA1(1 minute) criterion at monitoring location N-AT4.	MPO followed the NMP procedure and modified operations upon notification of the exceedance. MPO also notified (in writing) the affected landowners and tenants of the potential exceedance and completed additional monitoring during September – November 2021 closer to the affected landowners and tenants. The outcomes of the additional monitoring were communicated to DPE, affected landowners and tenants in December 2021.
17 February 2022	Dam Safety NSW	Declared Dams Audit – Tailings Storage Facility	MPO Tailings Storage Facility Stage 2 embankment raise project.	There were no regulatory non-compliances identified as part of the audit. Therefore, no follow up actions were required.
29 June 2022	Resources Regulator	Direction pursuant to section 240 (2A) of <i>Mining Act 1992</i>	Undertake a review of the water monitoring undertaken on the tailings storage facility and develop a plan to action the monitoring data to ensure safety of personnel.	MPO completed a review of the water monitoring at the tailings storage facility and a Stage 2 lift Health and Safety Management Plan.

### 3.4 Non-compliances

A summary of the non-compliances determined as part of the 2023 IEA are provided in Table 3.3.

**Table 3.3 Non-compliances**

Section	Requirement	Evidence	Findings/recommendations	Unique non-compliance identification number
<b>DA 92/97</b>				
Schedule 3, Condition 3	<p><b>Noise criteria</b></p> <p>Except for the noise-affected land referred to in Table 1, the Applicant must ensure that the operational noise generated by the development does not exceed the criteria in Table 3 at any residence on privately-owned land.</p> <p>Notes:</p> <ul style="list-style-type: none"> <li>To identify the locations referred to in Table 3, see the figures in Appendix 5.</li> <li>Noise generated by the development is to be measured in accordance with the relevant procedures and exemptions (including certain meteorological conditions) of the NSW Industrial Noise Policy, with the exception of the application of modifying factors under Fact Sheet C of the Noise Policy for Industry.</li> </ul> <p>However, these criteria do not apply if the Applicant has a written agreement with the relevant landowner to exceed the criteria, and the Applicant has advised the Department in writing of the terms of this agreement.</p>	<p>19/11/21 - DPE warning letter – Sustained exceedance (measurements at 00:18 and 00:54) of the LA1(1 minute) criterion at monitoring location N-AT4.</p> <p>Consultants monitoring reports.</p> <p>Monthly monitoring reports.</p> <p>Annual Reviews for 2020, 2021 and 2022.</p>	<p>Review of consultant's noise monitoring reports indicates: (<b>non-compliances in bold</b>, other comments not bold)</p> <ul style="list-style-type: none"> <li><b>April 2020 – Exceedance of the LA1,1 min criterion at N-AT4.</b></li> <li><b>July 2020 – Exceedance of the LAeq,15min and LA1,1min criteria at N-AT3.</b></li> <li>July 2021 – Exceedance of the LA1,1min criterion at N-AT3, although the follow-up measurement showed compliance.</li> <li><b>August 2021 – Exceedance of the LA1,1min criterion at N-AT4.</b></li> <li><b>November 2022 – Exceedance of the LA1,1 min criterion at N-AT4.</b> Exceedance of the LA1,1min criterion at N-AT5, although the follow-up measurement showed compliance.</li> </ul> <p>Review of the monthly monitoring reports prepared by MACH Energy indicates:</p> <ul style="list-style-type: none"> <li>December 2020 – Incorrect results were reported in Table 9-2 for the LAeq,15min levels at N-AT4 and N-AT5.</li> <li>July 2021 – The LA1,1min exceedance was not reported. The report only includes the follow-up measurement result.</li> <li>September 2021 – Incorrect results were reported in Tables 9-1 and 9-2 for the LAeq,15min and LA1,1min levels at N-AT4, N-AT5 and N-AT6.</li> <li>January 2022 – Incorrect results are reported in Table 9-2 for all LAeq,15min levels.</li> </ul> <p>A review of the 2020 Annual Review indicates:</p> <p>Results are correctly reported. Exceedances of the LA1,1min criterion at N-AT3 in July 2020 are acknowledged, however the Annual Review states noise levels would have been acceptable at more remote sensitive receptors. N-AT3 was later relocated closer to residences, which is appropriate.</p>	NC1

**Table 3.3**      **Non-compliances**

Section	Requirement	Evidence	Findings/recommendations	Unique non-compliance identification number
			<p>A review of the 2021 Annual Review indicates:</p> <ul style="list-style-type: none"> <li>Section 5.2.2 does not mention the exceedance of LA1,1min criterion in July consistent with the monthly monitoring report, although this event is correctly recorded in Appendix A.</li> <li>Section 5.2.3 states the August 2021 LA1,1min exceedance did not impact any residence, although this statement is not justified as N-AT4 is close to residences.</li> </ul> <p>A review of the 2022 Annual Review indicates:</p> <ul style="list-style-type: none"> <li>Section 5.2.2 correctly reports results for the period.</li> <li>Section 5.2.3 states the November 2022 LA1,1min exceedances did not impact any residence, although this statement is not justified as N-AT4 is close to residences.</li> </ul> <p><b><u>Other issues or recommendations (REC 1):</u></b></p> <ol style="list-style-type: none"> <li>All noise monitoring reports during the audit period indicate at least one Class 2 acoustic calibrator was used for a field-check of a Class 1 sound level meter, contrary to relevant standards and policies including IEC 61672-1 and Approved Methods for the Measurement and Analysis of Environmental Noise in NSW (EPA, 2022). A Class 1 calibrator must be used with a Class 1 sound level meter.</li> <li>One sound level meter calibration certificate in the January 2021 consultant's report was invalid, as it was dated after the noise survey.</li> <li>The April 2022 consultant's report did not include calibration certificates for any instruments.</li> </ol>	

**Table 3.3**      **Non-compliances**

Section	Requirement	Evidence	Findings/recommendations	Unique non-compliance identification number
Schedule 3, Condition 18	<b>Odour</b> The Applicant must ensure that no offensive odours are emitted from the site, as defined under the POEO Act, unless otherwise authorised by an EPL.	Annual Reviews for 2020, 2021 and 2022. 2020, 2021 and 2020 complaints registers.	12 odour complaints received in the audit period (no complaints regarding odour in 2023): <ul style="list-style-type: none"> <li>• 21/05/2020 – MACH Energy investigated and could not identify odour.</li> <li>• 05/08/2020 – MACH Energy investigated and found that smoke was coming from the Pit E RL185 dump and therefore a capping task was completed.</li> <li>• 27/04/2021 – MACH Energy investigated and could not identify odour or heated material.</li> <li>• 14/05/2021 – Meteorological data recorded and notes that a prescribed burn had taken place on the same day. Inconclusive.</li> <li>• 04/07/2021 – MACH Energy investigated and found a small amount of heated material present in Pit D.</li> <li>• 11/07/2021 – MACH Energy investigated and found a small amount of heated material on the pit dump in areas of Pit A, D, &amp; E. Capping was undertaken.</li> <li>• 15/08/2021 – MACH Energy investigated and found no areas of concern.</li> <li>• 15/08/2021 – MACH Energy investigated and found no heated materials in Pit C, D, R, F dumps.</li> <li>• 15/08/2021 – MACH Energy investigated and found no heated materials in Pit C, D, R, F dumps.</li> <li>• 15/07/2022 – MACH Energy investigated and found a small amount of smoke in the Northern Pit which did not reoccur the following day. Inspections were carried out on 15 and 16 July and odour was not detected.</li> <li>• 2022 Annual Review states that 3 odour complaints were made in 2022 and details the one above however, these are not identified as odour-related complaints in the 2022 complaints register (most likely spontaneous combustion).</li> </ul>	NC2

**Table 3.3**      **Non-compliances**

Section	Requirement	Evidence	Findings/recommendations	Unique non-compliance identification number
			<p><b>Recommendations:</b></p> <ul style="list-style-type: none"> <li>• <b>REC 2</b> – Complaints registers and Annual Reviews should be consistent in stating odour complaints (e.g. 2022 Annual Review mentions 3 odour complaints but these are not listed as ‘odour’ in the 2022 complaints register but rather, refer to spontaneous combustion and the ‘nature of complaint’ is ‘other’).</li> <li>• <b>REC 3</b> – MACH Energy should ensure that odour and fume management conditions per Section 9.5 of the AQGHGMP are reviewed for effectiveness, updated where necessary and are being implemented effectively following staff education and training.</li> </ul>	
Schedule 3, Condition 26	<p><b>Water discharges</b></p> <p>The Applicant must ensure that any 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, or</p> <p>b) relevant provisions of the POEO Act or Protection of the Environment Operations (Hunter River Salinity Trading Scheme) Regulation 2002.</p>	<p>Annual Reviews for 2020, 2021 and 2022.</p> <p>Letters to/from agencies reporting the events.</p> <p>Water management plan</p>	<p>Seven water discharge events occurred during the audit period following periods of heavy rain (1:5 year and 1:10 year rainfall events). These occurred on:</p> <ul style="list-style-type: none"> <li>• 8 March 2021 – failure of erosion and sediment controls resulted in run off leaving site.</li> <li>• 8 June 2021 – two separate discharges of sediment-laden water from MOD 4 construction area and into Wybong Road swale drains, where it ceased.</li> <li>• 12 November 2021 – discharge of sediment-laden water from the Rail 2 Project Area and into Wybong Road swale drains.</li> <li>• 8 December 2021 – discharge from four sediment basins (SD4, SD6, SD7 and ED2) offsite.</li> <li>• 9 December 2021 – discharge from four sediment basins (SD4, SD6, SD7 and ED2) offsite.</li> <li>• 8 March 2022 – discharge from five sediment basins (SD1, SD4, SD6, SD7 and TSB2) offsite.</li> <li>• 21 October 2022 – spillway discharge was observed from SD4.</li> </ul>	NC3



**Table 3.3**      **Non-compliances**

Section	Requirement	Evidence	Findings/recommendations	Unique non-compliance identification number
			<p>MPO confirmed during the site interviews that the sediment dams are designed, constructed and managed in accordance with <i>Managing Urban Stormwater: Soils and Construction – Volume 2E, Mines and Quarries</i> “the Blue Book” (Landcom 2004). The water releases exceeded capacities for which the sediment dams were designed and managed.</p> <p>Following the rainfall events, MPO completed investigations into the cause and reported the incidents to DPE and EPA.</p> <p>As required by the water management plan, water quality sampling was undertaken during the events, with water quality showing negligible changes in release water in pH, EC and TSS.</p> <p>Regular inspections of were implemented and undertaken prior to and during forecasted heavy rainfall events, in addition to regular third party inspections by a CPESC.</p> <p>MPO reviewed and updated the water management plan in accordance with Schedule 5, Condition 4.</p> <p><b><u>Recommendation (REC 5):</u></b> Ensure corrective actions as per the investigations of incident events are implemented.</p>	

**Table 3.3**      **Non-compliances**

Section	Requirement	Evidence	Findings/recommendations	Unique non-compliance identification number
Schedule 3, Condition 44F	<p><b>Construction of rail and water supply infrastructure</b></p> <p>All MOD 4 construction works outside of the Mining Lease Boundary must be carried out during Standard Construction Hours (7:00 am to 6:00 pm, Monday to Friday; and 8:00 am to 1:00 pm on Saturdays), unless the works are:</p> <ul style="list-style-type: none"> <li>a) required by: <ul style="list-style-type: none"> <li>– NSW Police, or</li> <li>– a public authority for the delivery of vehicles, plant or materials, or</li> </ul> </li> <li>b) required in an emergency to avoid the loss of life, damage to property or to prevent material harm to the environment, or</li> <li>c) approved under an Out of Hours Work Protocol.</li> </ul> <p><i>Note: The Mining Lease Boundary is shown in Figure 2 of Appendix 2.</i></p>	<p>2021 Annual Review.</p> <p>CEMP for MOD 4.</p>	<p>2021 Annual Review notes non-compliance on 31/3/21. Non-compliance reported. All construction works associated with MOD 4 has now been completed.</p> <p>Section 5.1.3 of the CEMP address the noted requirements.</p> <p>Noted an Out of Hours Works Protocol (OHWP), approved by the DPE Secretary 15/3/21. Available: <a href="https://machenergyaustralia.com.au/wp-content/uploads/Mount-Pleasant-Operation-Out-of-Hours-Work-Protocol-Final-March-2021.pdf">https://machenergyaustralia.com.au/wp-content/uploads/Mount-Pleasant-Operation-Out-of-Hours-Work-Protocol-Final-March-2021.pdf</a></p>	NC4

**Table 3.3**      **Non-compliances**

Section	Requirement	Evidence	Findings/recommendations	Unique non-compliance identification number
Schedule 3, Condition 44H	<p><b>Construction of rail and water supply infrastructure</b></p> <p>The Applicant must ensure that the combined operational noise of the development and noise generated by the MOD 4 construction works outside of the Mining Lease Boundary does not exceed the criteria in Table 10A at any residence on privately-owned land.</p> <p><i>Notes:</i></p> <ul style="list-style-type: none"> <li>• To identify the locations referred to in Table 10A, see the figures in Appendix 5.</li> <li>• The Mining Lease Boundary is shown in Figure 2 of Appendix 2.</li> <li>• Noise generated by the development is to be measured in accordance with the relevant procedures and exemptions (including certain meteorological conditions) of the NSW Industrial Noise Policy, with the exception of the application of modifying factors under Fact Sheet C of the Noise Policy for Industry.</li> </ul> <p>However, these criteria do not apply if the Applicant has a written agreement with the relevant landowner to exceed the criteria, and the Applicant has advised the Department in writing of the terms of this agreement.</p>	<p>Review of monthly monitoring reports and annual reviews.</p> <p>Construction equipment noise testing reports.</p> <p>Two construction noise monitoring reports, for 25–27 May 2021 and 10 August 2021.</p>	<p>Section 5.2.2 of the 2020 Annual Review states there were no exceedances of the construction noise criteria during the reporting period.</p> <p>Section 4.1 of the Construction Environmental Management Plan includes noise criteria for construction activities, for standard (daytime) construction hours.</p> <p>Section 6.2.1 of the Construction Environmental Management Plan states monitoring would occur according to the Noise Management Plan, which only requires noise monitoring at night.</p> <p>Review of construction equipment noise test reports indicates equipment produces acceptable sound power levels for heavy diesel powered machines.</p> <p>The construction noise survey report for 25-27 May 2021 indicated compliance with the construction noise criteria during the day. However, the day criteria were also incorrectly applied to the night period, with monitoring results indicating night noise levels reaching the range 40 to 50 L<sub>Aeq</sub> at the monitoring locations representative of nearest receivers.</p> <p>The construction noise survey report for 10 August 2021 Indicated compliance with the construction noise criteria during the day. No noise monitoring occurred during the night.</p> <p><b>Recommendation (REC 7):</b> Adopt appropriate noise criteria for any out-of-hours construction work. Appropriate criteria are generally identical to usual MPO noise criteria unless alternative criteria are agreed with EPA/DPE.</p>	NC5

**Table 3.3 Non-compliances**

Section	Requirement	Evidence	Findings/recommendations	Unique non-compliance identification number
Schedule 3, Condition 52	<p><b>Waste Management Plan</b></p> <p>The Applicant must prepare a Waste Management Plan for the development to the satisfaction of the Secretary. This plan must:</p> <ul style="list-style-type: none"> <li>a) be prepared in consultation with DPE Water and the Resources Regulator, and submitted to the Secretary for approval prior to carrying any development on site</li> <li>b) describe the measures that would be implemented to avoid, minimise, reuse and recycle all waste streams generated by the development</li> <li>c) include a fines emplacement plan</li> <li>d) a program to evaluate the fines emplacement plan and methods, with a view to emplacing fines within active mining areas.</li> </ul> <p>The Applicant must implement the management plan as approved by the Secretary.</p>	<ul style="list-style-type: none"> <li>a) Current version of Waste Management Plan approved by DPIE on 14 January 2019. Evidence of consultation provided in site version of the management plan.</li> <li>b) Chapter 5.</li> <li>c) Appendix 1.</li> <li>d) Section 7.2.</li> </ul> <p>MIA and CHPP area:</p> <ul style="list-style-type: none"> <li>a) Small hydrocarbon spills identified around workshop and refuelling bay.</li> <li>b) There were 1,000 L pods located around the CHPP and MIA laydown areas (some full, some mostly empty) with oil and other chemicals.</li> </ul>	<p>Non-compliant for hydrocarbon and chemical storage.</p> <p>Hydrocarbon spills to be managed in accordance with Waste Management Plan and spills procedure.</p> <p>1,000 L pods to be stored within appropriately bunded areas.</p> <p><b>Recommendation (REC 8):</b> Ensure all chemicals/hydrocarbons are appropriately stored in bunded areas.</p>	NC6

**Table 3.3 Non-compliances**

Section	Requirement	Evidence	Findings/recommendations	Unique non-compliance identification number
<b>EPL 20850</b>				
L3.1	<p><b>Noise limits</b></p> <p>Noise generated at the premises must not exceed the noise limits presented in the table below.</p> <p><i>Note:</i></p> <p><i>The noise limits in the table below do not apply if the licensee has a written agreement with the relevant landowner to exceed the noise limit and the licensee has advised the EPA in writing of the terms of the agreement.</i></p> <p><i>The noise limits in the table below do not apply to residences owned by the licensee or those residences that are subject to acquisition as listed in Table 1 of Schedule 3 of Development Consent DA 92/97 (MOD 4), dated 16 November 2018.</i></p> <p><i>Residences referenced in this table are from Table 3 of Schedule 3 of Development Consent DA92/97 (MOD 4), dated 16 November 2018 (EPA reference DOC19/1010437).</i></p>	<p>19/11/21 – DPE warning letter – Sustained exceedance (measurements at 00:18 and 00:54) of the LA1(1 minute) criterion at monitoring location N-AT4.</p> <p>Consultants monitoring reports.</p> <p>Monthly monitoring reports.</p> <p>Annual Reviews for 2020, 2021 and 2022.</p>	<p>Review of consultant's noise monitoring reports indicates: (<b>non-compliant in bold</b>, other comments non-bold)</p> <ul style="list-style-type: none"> <li>• <b>April 2020 – Exceedance of the LA1,1min criterion at N-AT4.</b></li> <li>• <b>July 2020 – Exceedance of the LAeq,15min and LA1,1min criteria at N-AT3.</b></li> <li>• July 2021– Exceedance of the LA1,1min criterion at N-AT3, although the follow-up measurement showed compliance.</li> <li>• <b>August 2021 – Exceedance of the LA1,1min criterion at N-AT4.</b></li> <li>• <b>November 2022 – Exceedance of the LA1,1min criterion at N-AT4.</b> Exceedance of the LA1,1min criterion at N-AT5, although the follow-up measurement showed compliance.</li> </ul> <p>Non-compliance as per 2022 Annual Return — Exceedance of EPA Point 8 (ID 8) LA (1 minute) and EPA Point 9 (ID 9) LA1 (1 minute) noise limit of 45dB during operator attended noise monitoring.</p> <p><b>Recommendation (REC 13):</b> Diligent noise management practises to avoid exceedances of the noise criteria.</p>	NC7
L4.3	<p><b>Blasting</b></p> <p>The airblast overpressure level from blasting operations in or on the premises must not exceed 120 dB (Lin Peak) at any time at any blast monitoring location specified in this licence.</p>	<p>Blast data.</p> <p>Annual Returns for 2020, 2021 and 2022.</p>	<p>A detailed review of blasting data indicates overpressure levels at all residential locations comply with this condition.</p> <p>Non-compliance as per 2022 Annual Return – A production blast resulted in an overpressure reading in excess of 120dBL registering at monitor B-VOA (EPA ID 12). Table 31 in the Annual Review notes no residences are located near this monitor and subsequent revision of the EPL has removed the requirement for a monitor at this location.</p> <p><b>Recommendation (REC 14):</b> Ensure the blast monitoring locations are regularly reviewed and represent closest privately owned receivers.</p>	NC8

**Table 3.3**      **Non-compliances**

Section	Requirement	Evidence	Findings/recommendations	Unique non-compliance identification number
L4.6	<p><b>Blasting</b></p> <p>Offensive blast fume must not be emitted from the premises.</p> <p><i>Definition:</i></p> <p><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></p> <ol style="list-style-type: none"> <li>4. <i>are harmful to (or likely to be harmful to) a person that is outside the premises from which it is emitted; or</i></li> <li>5. <i>interferes unreasonably with (or is likely to interfere unreasonably with) the comfort or repose of a person who is outside the premises from which it is emitted.</i></li> </ol>	<p>Annual Reviews for 2020, 2021 and 2022.</p> <p>2020, 2021 and 2020 complaints logs.</p>	<p>2020:</p> <ul style="list-style-type: none"> <li>A blast fume complaint was received on 15 June 2020.</li> <li>MACH Energy investigated this and found that emissions were likely to have left the boundary. Measures were put in place.</li> </ul> <p>2021:</p> <ul style="list-style-type: none"> <li>The 2021 Annual Review report reported no blast fume events in the reporting period however the 2021 complaints log mentions two blast fume complaints on 30/03/2021 and 26/05/2021. These were investigated by MACH Energy.</li> <li>The investigation of blasts on 30/03/2021 and 26/05/2021 found that the blast fume rating was zero and no post blast emissions left the EPL or DA boundary.</li> </ul> <p>2022:</p> <ul style="list-style-type: none"> <li>2022 complaints log did not report any blast fume complaints in regard to AQ or odour.</li> </ul> <p>2023:</p> <ul style="list-style-type: none"> <li>No complaints for Jan, Feb, Mar 2023.</li> </ul> <p><b>Recommendation (REC 15):</b> Review measures in the Blast Management Plan and the AQGHGMP for effectiveness and ensure these are being implemented on site.</p>	NC9

**Table 3.3**      **Non-compliances**

Section	Requirement	Evidence	Findings/recommendations	Unique non-compliance identification number
L5.1	<p><b>Potentially offensive odour</b></p> <p>No condition of this licence identifies a potentially offensive odour for the purposes of Section 129 of the Protection of the Environment Operations Act 1997.</p> <p><i>Note: Section 129 of the Protection of the Environment Operations Act 1997, provides that the licensee must not cause or permit the emission of any offensive odour from the premises but provides a defence if the emission is identified in the relevant environment protection licence as a potentially offensive odour and the odour was emitted in accordance with the conditions of a licence directed at minimising odour.</i></p>	<p>Annual Reviews for 2020, 2021 and 2022.</p> <p>2020, 2021 and 2020 complaints registers.</p>	<p>12 odour complaints received in the audit period (no complaints regarding odour in 2023):</p> <ul style="list-style-type: none"> <li>• 21/05/2020 – MACH Energy investigated and could not identify odour.</li> <li>• 05/08/2020 – MACH Energy investigated and found that smoke was coming from the Pit E RL185 dump and therefore a capping task was completed.</li> <li>• 27/04/2021 – MACH Energy investigated and could not identify odour or heated material.</li> <li>• 14/05/2021 – Meteorological data recorded and notes that a prescribed burn had taken place on the same day. Inconclusive.</li> <li>• 04/07/2021 – MACH Energy investigated and found a small amount of heated material present in Pit D.</li> <li>• 11/07/2021 – MACH Energy investigated and found a small amount of heated material on the pit dump in areas of Pit A, D, &amp; E. Capping was undertaken.</li> <li>• 15/08/2021 – MACH Energy investigated and found no areas of concern.</li> <li>• 15/08/2021 – MACH Energy investigated and found no heated materials in Pit C, D, R, F dumps.</li> <li>• 15/08/2021 – MACH Energy investigated and found no heated materials in Pit C, D, R, F dumps.</li> <li>• 15/07/2022 – MACH Energy investigated and found a small amount of smoke in the Northern Pit which did not reoccur the following day. Inspections were carried out on 15 and 16 July and odour was not detected.</li> <li>• 2022 Annual Review states that 3 odour complaints were made in 2022 and details the one above however, these are not identified as odour-related complaints in the 2022 complaints register (most likely spontaneous combustion).</li> </ul>	NC10

**Table 3.3**      **Non-compliances**

Section	Requirement	Evidence	Findings/recommendations	Unique non-compliance identification number
			<p><b>Recommendations:</b></p> <ul style="list-style-type: none"> <li>• <b>REC 2</b> – Complaints registers and annual reports should be consistent in stating odour complaints (e.g. 2022 Annual Report mentions 3 odour complaints but these are not listed as 'odour' in the 2022 complaints register but rather, refer to spontaneous combustion and the 'nature of complaint' is 'other').</li> </ul> <p><b>REC 16</b> – Use 'Consultation Manager' internal system to track all complaints and manage follow up.</p>	
O1.1	<p><b>Activities must be carried out in a competent manner</b></p> <p>Licensed activities must be carried out in a competent manner.</p> <p>This includes:</p> <ul style="list-style-type: none"> <li>a) the processing, handling, movement and storage of materials and substances used to carry out the activity</li> <li>b) the treatment, storage, processing, reprocessing, transport and disposal of waste generated by the activity.</li> </ul>	Site inspection.	<p>Non-compliant in the storage of materials and substances.</p> <p>The workshop area contained un-bunded chemicals in storage areas.</p> <p>All waste was disposed of and stored in appropriately labelled bins.</p> <p><b>Recommendation (REC 8):</b> Ensure all chemicals/hydrocarbons are appropriately stored in bunded areas.</p>	NC11



**Table 3.3**      **Non-compliances**

Section	Requirement	Evidence	Findings/recommendations	Unique non-compliance identification number
O3.1	<b>Dust</b> The premises must be maintained in a condition which minimises or prevents the emission of dust from the premises.	AQGHGMP. Annual Reviews for 2020, 2021 and 2022.	Management measures are detailed in the AQGHGMP and Annual Review reports. Site tour observations: <ul style="list-style-type: none"> <li>• Water sprays were sighted in use during site inspection. Measures were put in place following sighting of visual dust.</li> <li>• Evidence of dust during tipping - see photo Photograph F.8 and F.9.</li> </ul> <b>Recommendation (REC 17):</b> Site personnel to ensure that water sprays on materials/when loading or unloading materials are being applied per the AQGHGMP to minimise dust during tipping as far as possible. The measures in the AQGHGMP relating to this should be reviewed for effectiveness.	NC12
O3.2	<b>Dust</b> Activities occurring in or on the premises must be carried out in a manner that will minimise the generation, or emission from the premises, of wind-blown or traffic generated dust.	AQGHGMP. Annual Reviews for 2020, 2021 and 2022.	Management measures are detailed in the AQGHGMP and Annual Review reports. Site tour observations: <ul style="list-style-type: none"> <li>• Only minor evidence of dust in tipping –see photo Photograph F.8 and F.9.</li> <li>• Measures were put in place following sighting of visual dust.</li> </ul>	NC13
O3.3	<b>Dust</b> All trafficable areas, coal storage areas and vehicle manoeuvring areas in or on the premises must be maintained, at all times, in a condition that will minimise the generation, or emission from the premises, of wind-blown or traffic generated dust.	AQGHGMP. Annual Reviews for 2020, 2021 and 2022.	Management measures are detailed in the AQGHGMP and Annual Review reports. Site tour observations: <ul style="list-style-type: none"> <li>• Only minor evidence of dust in tipping – see photo Photograph F.8 and F.9.</li> <li>• Measures were put in place following sighting of visual dust.</li> </ul>	NC14

**Table 3.3**      **Non-compliances**

Section	Requirement	Evidence	Findings/recommendations	Unique non-compliance identification number
O3.9	<b>Dust</b>  For the purpose of condition O3.5 (e), dust suppression systems must be operated in a manner to ensure that there is no visible dust emissions emitted from the premises.	Site inspection.	Dust suppressors (water sprays) sighted around CHPP area/rail area in use during site inspection.  Evidence of visible dust in tipping – see photo Photograph F.8 and F.9. It is noted that measures were put in place to reduce/stop the visible dust.  <b>Recommendation (REC 17):</b> Site personnel to ensure that water sprays on materials/when loading or unloading materials are being applied per the AQGHGMP to minimise dust during tipping as far as possible. The measures in the AQGHGMP relating to this should be reviewed for effectiveness.	NC15
O5	<b>Emergency response</b>  Note: The licensee must prepare a Pollution Incident Response Management Plan (PIRMP) as per section 153A of the <i>Protection of the Environment Operations Act 2021</i> . The PIRMP must:  6. Include the information detailed in section 153A of the <i>Protection of the Environment Operations Act 2021</i> , and to be in the form required by clause 98B in the Protection of the Environment Operations (General) Regulation 2021.  7. Be kept at the premises to which the licence relates.  8. Be tested in accordance with clause 98E of the Protection of the Environment Operations (General) Regulation.	Sighted PIRMP (rev 05) during inspection. A copy of the PIRMP is available on MPO website.  Review of the Protection of the Environment Operations (General) Regulation 2022.	A copy of the PIRMP was sighted in the office during inspection. A copy of the PIRMP is available on MPO website.  As stated in the PIRMP, the most recent testing of the PIRNP was in January 2023. Prior to this, the PIRMP was tested in October 2021. This exceeds 12 months between tests. Clause 75 (2022 version) of the regulation states the PIRMP must be tested routinely at least once every 12 months. Therefore, this condition is non-compliant.  <b>Recommendation (REC 18):</b> MPO to test PIRMP at least once prior to January 2024 and annually thereafter.	NC16

**Table 3.3 Non-compliances**

Section	Requirement	Evidence	Findings/recommendations	Unique non-compliance identification number
M2.1	<p><b>Requirement to monitor concentration of pollutants discharged</b></p> <p>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>	<p>AQGHGMP.</p> <p>Annual Review for 2020, 2021 and 2022.</p> <p>Annual Returns for 2020, 2021 and 2022.</p> <p>Site inspection.</p>	<p>Details of monitors are provided in the AQGHGMP and Annual Review reports.</p> <p>Non-compliance per 2020 Annual Review report - <i>Incomplete data capture. No action required as data capture was high (at least 95% or 347 days) during the period. No action or comment required. Continue to capture data and monitor.</i></p> <p>Non-compliances in Annual Returns:</p> <ul style="list-style-type: none"> <li>• 2019–2020: PM<sub>10</sub> was not monitored continuously at EPL Point 1 (98.1%) and EPL Point 2 (92.7%) during the reporting period.</li> <li>• 2020–2021: PM<sub>10</sub> was not monitored continuously at EPL Point 1 (98.1%) and EPL Point 2 (92.7%) during the reporting period.</li> <li>• 2021–2022: PM<sub>10</sub> was not monitored continuously at EPL ID 1 (97.8%) and EPL ID 2 (52.6%) during the reporting period.</li> </ul>	NC17
M2.2	<p><b>Air Monitoring Requirements</b></p> <p><i>Note: Special Method 1 requires the licensee to undertake the monitoring of PM<sub>10</sub> concentrations in strict accordance with the manufacturer's operating manual supplied with the continuous monitoring equipment, or any updated versions as published by the manufacturer.</i></p>	<p>AQGHGMP.</p> <p>Annual Review for 2020, 2021 and 2022.</p> <p>Annual Returns for 2020, 2021 and 2022.</p> <p>Site inspection.</p>	As above.	NC18
M2.3	<b>Water and/or Land Monitoring Requirements</b>	<p>Surface water pH results are presented in monthly reports.</p> <p>Annual Returns for 2020, 2021 and 2022.</p>	<p>The 2020-2021 Annual Return only completed 3 samples during the annual return period. As stated in the condition, samples are required quarterly.</p> <p><b>Recommendation (REC 20):</b> Complete quarterly faecal and pH monitoring in line with the obligations of the EPL Condition M2.3.</p>	NC19

**Table 3.3 Non-compliances**

Section	Requirement	Evidence	Findings/recommendations	Unique non-compliance identification number
M4.1	<b>Weather monitoring</b> 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 respectively.	Annual Returns for 2020, 2021 and 2022.	The 2022 Annual Return reported a non-compliance against this condition stating: "Meteorological data at EPA ID 4 and 11 was not captured continuously (uninterrupted) during the reporting period."  Compliance with this condition was achieved during 2020 and 2021.	NC20
R5.2	<b>Noise Monitoring Report</b> For each Annual Return reporting period the licensee must submit a Noise Compliance Assessment Report to the EPA for that period. The report must: <ul style="list-style-type: none"> <li>a) be prepared by an appropriately qualified acoustic consultant and determine compliance with noise limits specified in this licence</li> <li>b) include all routine attended monitoring undertaken throughout the year</li> <li>c) include measurement and reporting of C-weighted noise levels</li> <li>d) outline management actions taken within the monitoring period to address any exceedances of the limits specified in this licence.</li> </ul>	Annual Returns for 2020, 2021 and 2022.  Noise Monitoring Reports.  Noise monitoring data.	This condition requires a specific noise compliance assessment report prepared by an independent consultant for each Annual Return reporting period. While the contents of the report are also available to the EPA in the monthly monitoring reports and Annual Reviews, those reports were not prepared by an appropriately qualified acoustic consultant and do not satisfy this condition.  <b>Recommendation (REC 22):</b> Noise Compliance Assessment Reports are to be prepared by an appropriately qualified acoustic consultant.	NC21

### 3.5 Previous audit recommendations

Table 3.4 outlines the audit recommendations that were made by SLR (2020) as part of the 2020 IEA.

**Table 3.4** Previous audit recommendations

Aspect	Recommendation	Response	Completed?
Bitumen track	<b><u>REC 1 – Bitumen track</u></b> General recommendation relating to bitumen track (light vehicle medium vehicle track). Develop remediation plan for the failed sections. Repair the section of the light vehicle track where the bitumen has failed. Until the repair is complete regular watercarts are required to reduce dust impacts.	Temporary repairs were on the LVMV road.  The detailed design has been completed by Stantec. A tender has gone to market to remediate the first 1,300 m of the road in 2023, with the intention of completing the remaining remediation in 2024. Until such time as the entire road can be repaired, MPO will continue to maintain the unsealed sections of the road.	Ongoing

**Table 3.4** Previous audit recommendations

Aspect	Recommendation	Response	Completed?
Dust	<p><b>REC 2 – Dust</b></p> <p>R2.1: Recommend reviewing the way dust is visually assessed with this based on the EPAs new Dust Management Handbook 2019.</p> <p>R2.2: Increased training in visual dust management at site. This should be regularly discussed and documented in toolbox talks. Increased training in visual dust management at site. This should be regularly discussed and documented in toolbox talks.</p> <p>R2.3: Ensuring water trucks are sent to areas of the site prior to there being a problem. If there is a delay in providing this water truck then operations need to change (e.g. Reduction in speed) or operations are to cease until adequate dust controls are available.</p> <p>R2.4: Update the MOP to include a defined timeframe to revegetate soil stockpiles.</p> <p>R2.5: Cameras of the pits could be more widely distributed to key MACH Energy Staff. Investigate establishing a series of video cameras to enable monitoring of key areas at the site which have high potential for dust and visual impacts. These would include the pits and higher areas of the site. All required personnel have access to cameras.</p> <p>R2.6: It is recommended that the calibration factor used with the Palas Fidas particulate monitors be based on a dataset that covers seasonal variations (rather than the single month the current calibration factors are based on) as changes in particulate loads, temperature, humidity, etc. can affect the instrument's readings.</p> <p>R2.7: It is recommended that an air quality expert be engaged to review exceedances of ambient air quality criteria where the exceedances are not due to exceptional events (as classified by the NSW DPIE) or invalid data. A summary report would also be included in the Annual Review.</p>	<p>R2.1–2.3: The EPA's Dust Assessment Handbook was reviewed by MPO.</p> <p>The operations were within the pit and a significant distance from the site boundary and sensitive receptors. Light winds were present, generally from the south-west (i.e. not towards key Complete closest receptors). As such, in-pit dust emissions would be considered unlikely to lead to off-site impacts.</p> <p>Further, no real time dust alarms were triggered at the time of the observations.</p> <p>Notwithstanding, the environmental team called for water carts to attend the pit area in question.</p> <p>MACH Energy noted that during the observation, water carts continued to operate in areas considered more likely to lead to offsite impacts.</p> <p>In addition, changes in operations, including reduction in speed and reducing or ceasing operations, occur as required during periods of elevated air quality levels or dust emissions.</p> <p>The daily dust risk forecast is provided to the Open Cut Examiner via email each morning to assist with operational planning and to inform the operations team of the dust risk for the day. Supervisors, OCEs, and the environment team also conduct regular checks on dust levels throughout MPO, and operators are proactive in responding to and communicating elevating dust levels.</p> <p>Daily pre-start meetings include discussion regarding dust management to each of the mining crews, including dust management during excavator loading.</p> <p>R2.4: The MOP has been updated to include timeframes for topsoil stockpile shaping and seeding.</p> <p>R2.5: MPO has multiple cameras within site, including those that cover the mining area.</p> <p>R2.6: Palas Fidas calibration is completed on a monthly basis.</p> <p>R2.7: Summary reports from air quality specialist have been included in the Annual Reviews.</p>	Yes

**Table 3.4** Previous audit recommendations

Aspect	Recommendation	Response	Completed?
Waste	<p><b><u>REC 3 – Waste</u></b></p> <p>R3.1: In-pit storage</p> <ul style="list-style-type: none"> <li>• Ensure all waste is separated out and stored in the correct waste or recycle bin.</li> <li>• Ensure all hydrocarbon spills are cleaned up.</li> <li>• All hydrocarbons and chemicals should be stored in bunded areas. Used drums and containers are still to be stored in a bunded area until they are taken off site.</li> </ul> <p>R3.2: Workshop area</p> <ul style="list-style-type: none"> <li>• Ensure Remondis label all waste bins.</li> <li>• Place oil pan under any engines/equipment stored in unbunded areas, that have the potential to drip any hydrocarbons/fluid etc.</li> <li>• Ensure all chemicals/hydrocarbons are bunded. This includes both full and empty oil drums/containers. Old hydrocarbon containers should be removed from site as soon as practical.</li> </ul> <p>R3.3: Construction offices</p> <ul style="list-style-type: none"> <li>• Ensure all waste is separated out and stored in the correct waste or recycle bin.</li> <li>• Ensure all chemicals/hydrocarbons are bunded.</li> <li>• Ensure all contaminated material is transported to the bioremediation area or disposed of offsite by a suitable qualified contractor.</li> </ul>	<p>Waste management has been re-tool boxed as required following regular environmental inspections.</p> <p>Areas of waste storage have been tidied up, including cleaning up of spills. Remondis have updated bin labels as required. Tracked in monthly Contractor meetings.</p> <p>Areas of waste storage have been tidied up, including cleaning up of spills. Bunding was reviewed and will be updated as required for storage areas. New plant and MIA upgrade taking place.</p> <p>Bio-remediation site upgraded.</p>	Yes

**Table 3.4** Previous audit recommendations

Aspect	Recommendation	Response	Completed?
Water management	<p><b><u>REC 4 – Water Management</u></b></p> <p>See water management/erosion and sediment control table in Section 5.4. There is a total of 13.</p>	<p>MPO engaged an external specialist to complete erosion and sediment control audits. Four ESC audits were completed during the IEA audit period. Recommendations were made during the ESC audits which MPO will continue to implement.</p> <p>The internal powerline pole that is located within the drainage line near the highwall dam has been monitored for integrity.</p> <p>The area near the current rehabilitation is being monitored and will be remediated with hay bales, if required. This area has been reworked, and permanent mine water management systems put in place as part of the MOD 4 construction works.</p> <p>Rill and gully erosion at the Mine Water Dam and Environment Dam 3 have been remediated.</p> <p>Rill and gully erosion at the Fines Emplacement Area has been remediated, with additional erosion measures put in place including geofabric in higher risk areas.</p> <p>The Water Management Plan will be updated to include all dams used in the mine water management system.</p> <p>Remediation of the borrow pit area, MIA drainage structures, CHPP and downstream of the MPO construction offices have been completed.</p> <p>Once construction areas are complete and rehabilitated (including adequate vegetation cover), sediment fencing is removed as part of the Ground Disturbance Permit close out process. This will continue to progress.</p> <p>The fines emplacement pipeline has end of line burst protection flow meters will alarm in the case of a spill.</p>	Yes



**Table 3.4**      **Previous audit recommendations**

Aspect	Recommendation	Response	Completed?
Noise monitoring/management	<p><b><u>REC 5 – Noise Monitoring/Management</u></b></p> <p>R5.1: The monthly reports on the website should continue to report against how the site compared against the cumulative noise criteria.</p> <p>R5.2: It is recommended that an appendix is prepared to the Annual Review that summarises noise performance including:</p> <ul style="list-style-type: none"> <li>• date of monitoring</li> <li>• compliance against NAG's noise criteria, including a table/tables that summarises actual noise levels during monitoring events</li> <li>• compliance against cumulative criteria.</li> </ul> <p>Note – these two recommendations have been addressed in the 2019 Annual Review and Monthly Reports with this completed following the initial findings during the site inspection.</p> <p>R5.3: Record the specific noise level triggers for good (green), caution (orange) and exceeding (red) in the Thiess real time noise monitoring system (computer program). Update the Noise Management Plan if required.</p>	<p>R5.1: This was addressed in the monthly reports.</p> <p>R5.2: This was addressed in the 2019 Annual Review and Monthly Reports following the initial findings during the 2020 audit site inspection.</p> <p>R5.3: The Thiess real time noise monitoring system was updated to reflect trigger level colours. No update to the Noise Management Plan was required.</p>	Yes

**Table 3.4** Previous audit recommendations

Aspect	Recommendation	Response	Completed?
Blasting	<p><b><u>REC 6 – Blasting</u></b></p> <p>R6.1: Any elevated blasting levels (i.e. Above 115 dBL and above 120 dBL) should be discussed in the monthly environmental reports. This does not have to be detailed but it needs to identify there could be a non - compliance based on the blast criteria.</p> <p>R6.2: Include a cumulative assessment of the percentage of blasts &gt;115 dBL year to date to ensure &lt;5%.</p> <p>R6.3: The time of the blasts for overpressure and vibration is not recorded in the 2017 and 2018 Annual Review. To be included in future Annual Reviews. Note – this has been addressed in the 2019 Annual Review.</p> <p>R6.4: The Annual Review and Monthly Environmental Reports should also record the day of the week that blasting occurred to verify no blasting is undertaken on a Sunday.</p> <p>R6.5 Ensure the Blast Scheduling information is available on the home page by a simple link i.e. 'Upcoming Blasting'. It is not obvious to find the blast scheduling information on the current website.</p> <p>R6.6: Results of blast fume monitoring should be included in monthly reports and the Annual Review.</p>	<p>R6.1: Addressed in monthly reports.</p> <p>R6.2: Addressed in monthly reports.</p> <p>R6.3: Addressed in monthly reports and the 2019 Annual Review.</p> <p>R6.4: Addressed in monthly reports and the 2019 Annual Review.</p> <p>R6.5: The MACH Energy website now has a 'ticker' on the front page that includes blast notification information.</p> <p>R6.6: Blast fume is reported in the monthly reports and in the Annual Reviews.</p>	Yes
Weed management	<p><b><u>REC 7 – Weed Management</u></b></p> <p>Continue to implement additional weed management activities onsite.</p>	<p>MPO engaged Enright Land Management to undertake weed and pest management. The scope included a site weed map and action plan, completed in 2019, and a quarterly weed management program.</p> <p>Thiess have recently employed a fulltime weed management expert to join their rehabilitation team who will manage weeds at MPO going forth.</p>	Yes
Aboriginal heritage	<p><b><u>REC 8 – Aboriginal Heritage</u></b></p> <p>Continue the process of progressing the covenant for the Aboriginal Conservation Area.</p>	<p>As reported in the 2022 Annual Review, suitable arrangements to provide appropriate long-term security for the Aboriginal Heritage Conservation Area (Areas B and C) are ongoing and include liaison with Heritage NSW and the RAPs for an alternative artefact keeping place and proposing Aboriginal Cultural Heritage survey of select biodiversity offset areas to potentially identify alternatives.</p>	Ongoing

**Table 3.4**      **Previous audit recommendations**

Aspect	Recommendation	Response	Completed?
Visual and community management	<p><b><u>REC 9 – Visual and Community</u></b></p> <p>It would be beneficial to have a camera in town pointing at the site for use of MACH Energy and contractors. This would assist in determining the impacts such as visual and dust.</p>	MPO have multiple cameras within site, including those that cover the mining area. An additional six cameras were installed in operational areas covering the active mining area.	
Rehabilitation	<p><b><u>REC 10 – Rehabilitation</u></b></p> <p>R10.1: Reshape, rip, topsoil and seed areas of rehabilitation which have been noted by Thiess as areas where improvement is required. MACH Energy have since provided evidence that this has been completed.</p> <p>R10.2: Some seeding should be completed in the area above ED2 which is showing signs of erosion.</p> <p>R10.3: Adding a defined timeframe to the MOP for how long topsoil stockpiles are stored until a cover crop is required. MACH Energy have since provided evidence that this has been completed.</p> <p>R10.4: Update the relevant document (MOP/RMP or Rehabilitation Strategy) to ensure there are no inconsistencies with the documents.</p>	<p>R10.1: Rehabilitation areas requiring improvement have been remediated.</p> <p>R10.2: Remediation works have been completed in this area, including remediation of the access road and areas surrounding water monitoring infrastructure. Areas have been seeded, as required.</p> <p>R10.3: The MOP was updated to include defined timeframes to shape and seed topsoil stockpiles.</p> <p>R10.4: The RMP was updated in August 2022.</p>	Yes
Management Plans	<p><b><u>REC 11 – Management Plans</u></b></p> <p>R11.1: When management plan updates are required in the future consider creating a table system for mitigation measures with separate columns for:</p> <ul style="list-style-type: none"> <li>• mitigation ID</li> <li>• mitigation measure</li> <li>• reference document</li> <li>• when required</li> <li>• responsibility.</li> </ul> <p>Based on discussions with site a staged approach is recommended.</p> <p>R11.2: Update wording in the Annual Review to outline which management plans require updating and which management plans do not require updating.</p>	MPO have advised that management plans will be updated when necessary to include this recommendation.	Ongoing

### 3.6 EMP, sub-plans and compliance documents

To determine the adequacy of the management plans applicable to the operation of MPO, the EMM audit team conducted reviews of the following plans:

- Environmental Management Strategy
- Noise Management Plan
- Blast Management Plan
- Air Quality and Greenhouse Gas Management Plan
- Biodiversity Management Plan
- Water Management Plan
- Aboriginal Heritage Management Plan
- Visual Management Plan
- Waste Management Plan
- Rehabilitation Management Plan.

The adequacy and implementation of these plans were also assessed during the site inspection. EMM determined these plans to be adequate for operation and implemented appropriately.

Opportunities for improvement are discussed in detail in Section 4.2.

### 3.7 Environmental performance

In addition to the above, in a letter dated 19 December 2022, the DPE requested the input of technical experts in the following fields:

- air quality and greenhouse gas
- biodiversity manage and offsetting
- noise.

A summary of their findings on environmental performance and those deemed relevant by the lead auditor are included below.

#### 3.7.1 Noise, blast and vibration

Bridges Acoustics prepared a noise, blast and vibration audit report which is attached as Appendix E.

The acoustic audit included a comparison between the measured noise and blast levels from MPO in the consultant's noise and blast monitoring reports, the levels reported in the Monthly Environmental Monitoring Reports prepared by Mach Energy and the Annual Reviews also prepared by Mach Energy.

Some differences between the consultant's noise reports and the reported noise data in the monthly and annual reports prepared by Mach Energy were noted, generally due to transcription and/or copy/pasting errors.

Significant non-compliances with acoustic conditions in DA 92/97 and EPL 20850 relate to occasional noise levels over relevant criteria at monitoring locations north-east and south-east of MPO and night construction work on rail infrastructure that was not assessed to the correct night noise criteria and would have exceeded the correct night criteria at closest residences.

Less significant non-compliances with acoustic conditions, in that no acoustic impact occurred to any residence or other sensitive location as a result of these non-compliances, relate to a blast overpressure level measured at a location that does not represent a sensitive location, failure to prepare and submit all required compliance reports to the EPA and failure of the noise monitoring consultant to implement and document instrument calibration procedures in relevant standards.

Management plans, including key issues such as noise and blast monitoring locations, are appropriate and consistent with current best practise. Previous acoustic related commitments have been met.

Overall, MPO has been operated and managed in a competent manner from an acoustic perspective. Increased vigilance in implementing noise management measures, particularly during light winds from the western quadrant which is believed to be the main cause of noise criteria exceedances during the audit period, has been recommended to reduce the risk of noise criteria exceedances in the next few years.

### 3.7.2 Air quality and greenhouse gas emissions

Air quality and greenhouse gas emissions data were generally presented in a consistent and logical manner. Multi-year summaries were provided where data were available, allowing for analyses of patterns in the data, anomalies, and comparison to criteria.

There were 12 odour complaints received during the audit period which related to potential spontaneous combustion. There were two odour complaints in 2020, seven in 2021 and three in 2022. There were no odour complaints made in 2023 up to the end of the audit period. All complaints were investigated and documented by MACH Energy. Some appeared to be linked to potential spontaneous combustion and in some cases, odour or heated material was not identified.

There were no exceedances of applicable criteria for PM<sub>10</sub>, PM<sub>2.5</sub> or TSP during the audit period. Measured annual average TSP, PM<sub>10</sub> and PM<sub>2.5</sub> concentrations decreased from 2020 with the exception of PM<sub>10</sub> at monitoring APF2, which increased slightly in 2022 despite remaining well below the criterion. Dust deposition levels also decreased from 2020 and were under the criterion for the audit period with the exception of dust gauges D7, and D8<sup>1</sup>.

Greenhouse gas emissions increased by 44,962 t (or 6.3%) CO<sub>2</sub>-e in 2022 compared to 2021. It is noted however that the amount of ROM coal mined increased by 516,506 t in 2022.

### 3.7.3 Biodiversity management, rehabilitation and offsetting

The audit of biodiversity management and rehabilitation largely included a review of activities undertaken in accordance with the Biodiversity Management Plan and Rehabilitation Management Plan (RMP), as required by DA 92/97. It is noted that no biodiversity offsets are required under DA 92/97, offsets are required under the Environmental Protection and Biodiversity Conservation Act (EPBC Act) approval 2011/5796. EPBC Act approval 2011/5796 is excluded from the scope of this audit.

No incidents or complaints were noted within the 2020, 2021 or 2022 Annual Reviews in relation to biodiversity management and rehabilitation. It is noted that the Resource Regulator identified MPO to have a leading practice in the construction quality assurance system for site rehabilitation in August 2021, as further described in Section 3.3.

<sup>1</sup> The Annual Reports state that D7 is located within the MPO boundary and between the MPO and a neighbouring mine and is therefore not used to assess compliance or to represent residences in the area. D8 is representative of the nearest residences which are subject to acquisition and therefore under the Development Consent, do not need to comply with the air quality criteria.

The audit determined that biodiversity management was undertaken in accordance with DA 92/97, in which systems established under the BMP, namely the ground disturbance procedure (GDP) and pre-clearance procedure, had been effectively implemented. The site inspection also sighted evidence of the salvage and relocation of features for habitat enhancement. The site inspection did identify that weed management across MPO could be improved. This has been recognised by MPO who have directly employed a weed management officer to improve weed management outcomes.

A review of the relevant Annual Reviews determined that rehabilitation has generally occurred in accordance with DA 92/97 and the RMP during the audit period. The site inspection sighted evidence of progressive rehabilitation activities and established rehabilitation currently under management. Weed management was identified as potential risk to the ongoing success of rehabilitation. A number of drainage channels within the rehabilitated areas were observed to be eroded.

### 3.7.4 Visual

During the audit period, visual screening along the Stage 2 rail infrastructure alignment was completed and progressive rehabilitation of the eastern out of pit emplacement area was undertaken. A total of 16 complaints were documented in 2021 in relation to visual impacts, whereas two were received during 2022 which demonstrates a reduction in visual impacts experienced by the community in proximity of MPO.

### 3.7.5 Water

#### i Water usage

MPO hold a series of water access licences (WAL) which are allocated under the *Water Sharing Plan for the Hunter Unregulated and Alluvial Water Sources 2009*.

The water reporting period is between 1 July – 30 June. As the water reporting period differs from the IEA period, water usage has been assessed based on the water take data reported in the 2021 and 2022 Annual Reviews.

The Annual Reviews reported that all water take associated with the operation of MPO has been below the allocated water entitlements during the audit period.

#### ii Water management

Water management is undertaken in accordance with the MPO Water Management Plan. During the site inspection, EMM observed a number of water storages, pipelines, pumps and sediment control structures consistent with the Water Management Plan and DA 92/97.

#### iii Water discharge

As noted in Appendix A, there were seven water discharge events which occurred during the audit period following periods of heavy rain. All events were reportable incidents and were reported to DPE and the EPA following the event. As required by the Water Management Plan, water quality sampling was undertaken during the events, with water quality showing negligible changes in the release water in pH, EC and TSS.

Regular inspections were implemented and undertaken prior to and during forecasted heavy rainfall events, in addition to regular third party inspections by a certified professional in erosion and sediment control (CPESC).

### 3.7.6 Waste

Waste is managed in accordance with the MPO Waste Management Plan. Waste management was sighted during the site inspection which identified a small hydrocarbon spill identified around workshop and refuelling bay. There were a number of 1,000 L pods located around the CHPP and MIA laydown areas (some full, some mostly empty) with oil and other chemicals. A recommendation (REC 8) has been made to ensure all chemicals/hydrocarbons are appropriately stored in bunded areas.

EMM sighted numerous waste and recycling bins around the site which were observed to be in order. There was no evidence of cross contamination of recyclable materials (refer to Photograph F.13 and F.14 in Appendix F).

Tyre disposal is generally in accordance with EPL 20850. It is recommended (REC 19) that the waste management requirements of Condition O6.1 be included in the Thiess Mount Pleasant Handling and Disposal of Waste Procedure.

### 3.7.7 Aboriginal cultural heritage

Aboriginal cultural heritage is managed in accordance with the Aboriginal Heritage Management Plan.

As reported in the 2022 Annual Review, suitable arrangements to provide appropriate long-term security for the Aboriginal Heritage Conservation Area (Areas B and C) are ongoing and include liaison with Heritage NSW and the RAPs for an alternative artefact keeping place and proposing Aboriginal Cultural Heritage survey of select biodiversity offset areas to potentially identify alternatives.

EMM observed Aboriginal heritage sites located at MPO to be fenced off and protected (refer to Photograph F.38 and F) during the site inspection.

In accordance with the obligations of the DA 92/97 Statement of commitments, a Historic Heritage Management Plan was prepared as part of the MOD 4 Construction Environmental Management Plan (CEMP) for the work undertaken with the Stage 2 rail project. All works were undertaken in accordance with the CEMP to ensure the appropriate management of the Overton Orchard and Race Track.

## 3.8 Consultation outcomes

Consultation was completed with the government agencies and the community consultative committee listed in Section 2.6. A summary of the consultation is included in Table 3.5, with evidence of consultation attached as Appendix C.



**Table 3.5**      **Consultation**

Agency/CCC member	Date	Method	Aspects/issues raised	Response
DPE	20/2/2023	Email	Email from Lead Auditor requesting advise of other parties or agencies who should be consulted to assist in informing the scope of the IEA.	Response received from DPE on 21/2/2023 – see below.
	21/2/23	Email	<p>The following comments were received from DPE:</p> <p>1. The auditor should consult with the following parties or agencies in the development of the IEA scope:</p> <ul style="list-style-type: none"> <li>• NSW Department of Regional NSW, Mining, Exploration and Geoscience</li> <li>• NSW Department of Planning and Environment, Biodiversity Conservation Division</li> <li>• NSW Department of Planning and Environment, Water Division</li> <li>• NSW Environment Protection Authority</li> <li>• NSW Resources Regulator</li> <li>• Muswellbrook Shire Council</li> <li>• Community Consultative Committee.</li> </ul>	<p>EMM issued letters to the below agencies, council and CCC seeking input to the IEA scope on 1 March 2023:</p> <ul style="list-style-type: none"> <li>• NSW Department of Regional NSW, Mining, Exploration and Geoscience</li> <li>• NSW Department of Planning and Environment, Biodiversity Conservation Division</li> <li>• NSW Department of Planning and Environment, Water Division</li> <li>• NSW Environment Protection Authority</li> <li>• NSW Resources Regulator</li> <li>• Muswellbrook Shire Council</li> <li>• Mount Pleasant CCC.</li> </ul> <p>Response received from MEG, BCD, Resource Regulator, MSC and two members of the CCC. All responses are summarised within this table. Responses were not received from DPE Water or the EPA. It is noted that the MEG referred the request for IEA input to the Resource Regulator and provided no further matters for consideration.</p>

**Table 3.5**      **Consultation**

Agency/CCC member	Date	Method	Aspects/issues raised	Response
DPE	21/2/23	Email	<p><b>2. Greenhouse Gas Emissions</b></p> <ul style="list-style-type: none"> <li>A comparison of the actual annual greenhouse gas emissions generated during the audit period against the predictions in the environmental assessment.</li> <li>An assessment of the adequacy of the measures employed by the site during the audit period to reduce greenhouse gas emissions.</li> </ul>	<ul style="list-style-type: none"> <li>Section 5.4.3 of the 2021 and 2022 Annual Reviews compare GHG emissions for that financial year against those presented in MOD 3 EA (Mount Pleasant Operation Mine Optimisation Modification Air Quality and Greenhouse Gas Assessment [TAS, 2017]). GHG emissions increased by approx. 44,962 t CO<sub>2</sub>-e in 2022. It's noted that ROM increased in 2022 by approx. 515,000 t. MOD 3 EA 2021 predicted = 247,851 t CO<sub>2</sub>-e vs actual of 711,080 CO<sub>2</sub>-e MOD 3 EA 2022 predicted = 232,159 t CO<sub>2</sub>-e vs actual of 756,041 CO<sub>2</sub>-e The Annual Review reports for 2021 and 2022 state that <i>'The differences in the fugitive emission estimates between TAS (2017) and MACH's NGERs reporting arise primarily due to differing methodologies and associated emission factors being employed under the differing regulatory systems (i.e. NGERs reporting under the Commonwealth National Greenhouse and Energy Reporting Act 2007 using NGA default emission factors, and environmental assessment under the NSW Environmental Planning and Assessment Act 1979 using site-specific emissions data), plus periodic revisions to the GWP of methane, which is a large component of the fugitive emissions from coal mines.'</i></li> </ul> <p><b>Recommendation:</b> the totals in the GHG emissions tables presented in the Annual Review reports are provided.</p> <ul style="list-style-type: none"> <li>The 2022 Annual Review report and AQGHGMP lists the following measures: <ul style="list-style-type: none"> <li>Optimising the design of haul roads to minimise the distance travelled between the pit and the CHPP.</li> <li>Minimising the re-handling of material (i.e. coal, overburden and topsoil).</li> <li>Maintaining the fleet in good operating order.</li> </ul> It is noted that GHG emissions increased in 2022 (see above). Other measures to reduce GHG emissions may include: <ul style="list-style-type: none"> <li>Investigate the option to source all purchased electricity from certified renewable electricity providers.</li> <li>Where feasible, equipment compliant with a more recent emission standard than USEPA Tier 2 will be sourced.</li> <li>Where feasible, electricity-powered mining equipment will be adopted.</li> <li>Haul roads will be routinely maintained to reduce truck tyre rolling resistance.</li> </ul> </li> </ul>

**Table 3.5**      **Consultation**

Agency/CCC member	Date	Method	Aspects/issues raised	Response
				<ul style="list-style-type: none"> <li>– Haulage routes will be optimised to reduce haulage distances wherever feasible.</li> <li>– All equipment will be routinely serviced to maintain manufacturers' emission specifications.</li> <li>– Performing pre-start inspections at each shift on mobile plant and vehicles.</li> <li>– Idling of diesel equipment will be minimised wherever feasible.</li> <li>– Low-sulfur diesel fuels and lubricants will be used where feasible.</li> <li>– Tracking electricity bills and fuel usage.</li> <li>– Investigate the feasibility of installing solar panels at the project site.</li> </ul>
DPE	21/2/23	Email	<b>3. Noise Management</b> Adequacy of noise monitoring locations and mitigation measures.	<p>Location N-AT1 represents closest receivers to the south-west with a criterion of 43 LAeq. Receiver 258a is further from MPO with a criterion of 40 LAeq. The NMP does not justify the selected location and increased criterion.</p> <p>Location N-AT2 represents closest receivers to the north-west with a criterion of 36 LAeq. Receiver 272 is a similar distance from MPO with a criterion of 36 LAeq. This location is appropriate.</p> <p>Location N-AT3 represents closest receivers to the north-east with a criterion of 41 LAeq. Receiver 140a is nearby with a criterion of 39 LAeq. The location appears appropriate, after having been recently adjusted, however the NMP does not justify the increased criterion at this location.</p> <p>Location N-AT4 represents closest receivers to the south-east with a criterion of 42 LAeq. Receiver 74 is nearby with a criterion of 42 LAeq and Receiver 77 is slightly further from MPO with a criterion of 41 LAeq. This location is appropriate.</p> <p>Location N-AT5 represents closest receivers near Racecourse Rd with a criterion of 40 LAeq. Racecourse Rd receivers, further from MPO, are in NAG 8 with a criterion of 39 LAeq. This location is adequate, or can optionally be relocated to Racecourse Rd closer to receivers with a criterion of 39 LAeq.</p> <p>Location N-AT6 represents closest receivers to the far south-west with a criterion of 35 LAeq. Closest receivers are outside all NAGs and are classified as 'all other land' with a criterion of 35 LAeq. Monitoring reports indicate MPO is rarely audible at this location, therefore ongoing monitoring may not be justified and this location can most likely be omitted.</p>

**Table 3.5**      **Consultation**

Agency/CCC member	Date	Method	Aspects/issues raised	Response
				<b><u>Recommendation:</u></b> Amend the NMP to justify the location and criteria for N-AT1 and the criteria at N-AT3. Consider omitting N-AT6 from the NMP and future noise surveys.
DPE	21/2/23	Email	<b>4. Surface Water Management</b> Adequacy of measures undertaken to minimise the occurrence and impact of unplanned dirty water discharge.	<p>During site inspection EMM sighted a number of sediment control structures including SD1, SD3, SD4 and ED2 among others. EMM sighted daily inspection sheets ensuring structures were adequately maintained. EMM sighted corrective actions in response to daily inspections including dewatering of sediment dams and removal of sediment laden within dams to maintain adequate capacity.</p> <p>In addition, EMM sighted early works currently in execution phase to reduce the risk of dirty water discharge by means of installation of water height telemetry and camera network.</p> <p>Site confirmed that dams have been constructed in accordance with approval requirements and accepted engineering principles. EMM noted ED2 whilst not strictly identified as a sediment dam does provide protection from unplanned dirty water discharges below the eastern emplacement area. It is recommended ED2 be managed in accordance with other sediment structures at MPO. Namely ensuring adequate float remains within ED2, reflective of the catchment. Furthermore, it is recommended telemetry proposed for other sediment dams be installed at ED2.</p>
BCD	1/3/2023	Email	Email from Lead Auditor requesting any advice regarding any areas of compliance or environmental management at MPO, that should be of particular focus and included within the IEA scope.	Response received from BCD on 9/3/2023 – see below.

**Table 3.5**      **Consultation**

Agency/CCC member	Date	Method	Aspects/issues raised	Response
BCD	9/3/2023	Email	<p>The following comments were provided from BCD:</p> <ul style="list-style-type: none"> <li>An assessment of what contingency measures are available to minimise impacts of actions under the current consent to <i>Delma vescolineata</i> animals and habitat, and recommended management actions for the 'Mount Pleasant Operation Biodiversity Management Plan' for when it is next revised. BCD notes that the current Biodiversity Management Plan is dated 31 October 2019 and that <i>Delma impar</i> was not considered for this project, but has since been found on site during the assessment for the adjacent Mount Pleasant Optimisation Project.</li> <li>An assessment of weed control works – is herbicide spraying and manual removal sufficient to control weed species 'to an appropriate level', particularly <i>Galenia pubescens</i>, Boxthorn, Mother of Millions, Prickly Pear and St Johns Wort which have been found on site (Section 5.5.2 of the 2020 and 2021 Annual Reviews). If not, what other weed control actions would EMM recommend? BCD notes that the establishment of such exotic species may hamper the realisation of some rehabilitation goals.</li> </ul>	<ul style="list-style-type: none"> <li><i>Delma vescolineata</i> is not listed in NSW and there is no legal requirement for MPO to manage this species within the current approval. MPO may wish to undertake additional management actions for this species, but would not be required to do so until such time as they revise the BMP for the Optimisation Project. Noting this, it is considered that <i>Delma vescolineata</i> is not within the scope of this audit, which is to "...assess the environmental performance of the development and whether it is complying with the requirements in this consent...".</li> <li>Rehabilitation works at MPO have been ongoing since 2018 with monitoring undertaken from 2019. Rehabilitation is in the early phases of development. Monitoring indicates that weed cover across rehabilitation areas is quite high (2.9–76.6%) with high-threat weed cover, which presents a significant risk to achieving rehabilitation objectives, ranging from 0.2–61%. Complete removal of weeds is an unachievable objective; management should focus on managing high-threat weeds to ensure rehabilitation area tracking towards analogue sites.</li> </ul>
DPE Water	1/3/2023	Email	Email from Lead Auditor requesting any advice regarding any areas of compliance or environmental management at MPO, that should be of particular focus and included within the IEA scope.	No response has been received from DPE Water.
EPA	1/3/2023	Email	Email from Lead Auditor requesting any advice regarding any areas of compliance or environmental management at MPO, that should be of particular focus and included within the IEA scope.	No response has been received from DPE Water.

**Table 3.5**      **Consultation**

Agency/CCC member	Date	Method	Aspects/issues raised	Response
MEG	1/3/2023	Email	Email from Lead Auditor requesting any advice regarding any areas of compliance or environmental management at MPO, that should be of particular focus and included within the IEA scope.	Email from MEG to Resources Regulator deferring responsibility on 2/3/2023.
MSC	1/3/2023	Email	Email from Lead Auditor requesting any advice regarding any areas of compliance or environmental management at MPO, that should be of particular focus and included within the IEA scope.	Response from MSC received on 1/3/2023 – see below.
MSC	1/3/2023	Email	The following comments were provided by MSC: 1. Consider inclusion of <i>Risk Levels for Non-Compliances</i> in accordance with DPE’s IEA Guidelines (2015)? This makes it easier for the community to interpret the outcomes of the IEA.	As required by the DPE, the IEA and audit report has been conducted in accordance with the current guidelines <i>Independent Audit – Post Approval Requirements</i> (DPE, May 2020). Section 3.8 of the 2020 guidelines state that the terms compliant, non-compliant and not triggered must be used. No other terms may be used to describe the compliance status. The terms partial compliance, partial non-compliance, not verified or administrative non-compliance or other similar terms must not be used.
MSC	1/3/2023	Email	2. Provide a review and summary of the process for temporary rehabilitation for areas that are not going to be rehabilitated for some time (assumed to be six months).	Temporary rehabilitation is currently and will continue to occur in accordance with the Rehabilitation Management Plan (RMP). Landform establishment will occur in accordance with Section 6.2.3 of the RMP. Temporary rehabilitation will then be seeded with a temporary cover crop species in accordance with Section 6.2.4 of the RMP.  Temporary rehabilitation was sighted during the site inspection at the eastern emplacement area.

**Table 3.5**      **Consultation**

Agency/CCC member	Date	Method	Aspects/issues raised	Response
MSC	1/3/2023	Email	<p>3. DA 92/97 does not include the requirement to prepare a Historic Heritage Management Plan (other than for MOD4 construction works). However, the MTP EIS (1997) for DA 92/97 lists the following items to be impacted by blasting:</p> <ul style="list-style-type: none"> <li>• Rosedale Cottage, Kayuga</li> <li>• Negoa Homestead</li> <li>• Old Cemetery, Kayuga</li> <li>• Kayuga 1827 homestead</li> <li>• Bengalla homestead</li> <li>• Overdene homestead.</li> </ul> <p>Section 10.5.2 of the EIS states that the following safeguards will be used to protect impacted items:</p> <ul style="list-style-type: none"> <li>• Surveying buildings to assess their condition and ability to withstand expected maximum levels of vibration and overpressure.</li> <li>• Subject to the above, temporary reinforcement of buildings to minimise damage induced by blasting.</li> <li>• Regular monitoring.</li> <li>• Restoration of damage once impacts are within accepted standards.</li> </ul> <p>Please provide commentary on works being undertaken to address the above.</p>	<p>MPO confirmed since the environmental assessment completed to inform DA 92/97, blast design parameters have been adopted (maximum blast MIC 1,600kg) ensuring blasting impacts experienced at noted historic heritage items would comply with the conservative building damage vibration criteria of 10 mm/s and airblast overpressure criterion of 130 dBL, consistent with DA 92/97. Negating the requirement for ongoing monitoring. Noting blast monitors located at Negoa homestead and Kayuga, sample of blast data was sighted by audit team confirm results being below relevant limits.</p> <p>Of the noted buildings MPO owns the Negoa Homestead only, which is actively managed to ensure the building is maintained. EMM sight records of structural inspections, pest management, building repairs and restoration works.</p> <p>Site confirmed that temporary reinforcement of buildings not triggered. Blasting impacts were appropriately mitigated to avoid impacts to historic heritage structures.</p> <p>Ongoing monitoring is no longer required, in appreciation of blast design criteria.</p> <p>Negoa Homestead actively managed under MPO property portfolio.</p> <p>All other noted properties not owned by MPO with conservation management the responsibility of the associated owner.</p> <p>Temporary reinforcement of buildings not triggered.</p>
MSC	1/3/2023	Email	<p>4. Review the adequacy of the automated dust suppression spray systems at the ROM hopper, conveyor transfer points and product stockpiles</p>	<p>The ROM hopper sighted with water sprays actively managing dust from loader operations. Water cart relied upon to manage dust on ROM pad.</p> <p>Conveyor transfer points – conveyors enclosed no dust visible at transfer points at time of site inspection.</p> <p>Product stockpile – water sprays actively managing dust at stockpiles. No dust visible at time of site inspection.</p>



**Table 3.5**      **Consultation**

Agency/CCC member	Date	Method	Aspects/issues raised	Response
MSC	1/3/2023	Email	5. Clarify if there has been anytime when there has been no access to the meteorological data or PM10 data from the Muswellbrook NW Upper Hunter Air Quality Monitoring Network monitoring station. If so, clarify the frequency	The Muswellbrook NW Upper Hunter Air Quality Monitoring Station is part of the New South Wales Air Quality Monitoring Network managed by the New South Wales Government. Access to this information is not influenced by MACH Energy, as such this is considered to be outside the audit scope.
MSC	1/3/2023	Email	6. Section 10.3.9 of the EIS (1997) proposes the following: “monitoring of demand for temporary accommodation”. Please confirm whether MACH Energy are monitoring the demand for temporary accommodation.	The Mount Pleasant Optimisation Project – Social Impact Assessment dated December 2020, completed during the audit period contains an assessment of temporary accommodation.  Internal documentation relied upon to inform business cases for future project sighted inclusive of an assessment of temporary accommodation.
Resources Regulator	1/3/2023	Email	Email from Lead Auditor requesting any advice regarding any areas of compliance or environmental management at MPO, that should be of particular focus and included within the IEA scope.	Response received from Resources Regulator on 3/3/2023 – see below.

**Table 3.5**      **Consultation**

Agency/CCC member	Date	Method	Aspects/issues raised	Response
Resources Regulator	3/3/2023	Email	<p>The following comments were provided from Resources Regulator:</p> <p>Thank you for your email and letter dated 1 March 2023 requesting consultation on the independent environmental audit to be undertaken of the Mount Pleasant Coal Mine which is covered by the following mining leases:</p> <ul style="list-style-type: none"> <li>• ML1645 (1992)</li> <li>• ML1713 (1992)</li> <li>• ML1708 (1992)</li> <li>• ML1750 (1992)</li> <li>• ML1709 (1992)</li> <li>• ML1808 (1992).</li> </ul> <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 six mining leases that comprise Mount Pleasant Coal 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>It would be appreciated if a copy of the final audit report could be sent to the Regulator at <a href="mailto:nswresourcesregulator@service-now.com">nswresourcesregulator@service-now.com</a> upon completion of the audit.</p>	This has been assessed under the Mining Leases audit table – Table A.4 of Appendix A.

**Table 3.5**      **Consultation**

Agency/CCC member	Date	Method	Aspects/issues raised	Response
CCC Members	21/2/2023	Email	Email from MPO to CCC Members requesting any aspects they would like addressed in the IEA.	Two CCC member responded – see below.
Llewellyn Bates – CCC Member	5/3/2023	Email	The following comments were provided by Llewellyn Bates: Having read the letter from EMM, and with reference to paragraph 2 – I would like the Fines Emplacement Area to be of particular focus and included within the IEA scope.	The fines emplacement area was inspected as part of the audit site visit. Works considered consistent with approval. Identified sediment erosion controls, stabilisation works and established cover crops on temporary disturbed areas. Noted that dumped overburden behind the Fines Emplacement area should be seeded to reduce erosion risk. MPO were aware of this.
Anthony Lonergan – CCC Member	22/2/2023	Email	The following comments were provided by Anthony Lonergan: I would like the auditors to look at a couple of issues:  1. I don't know the numbers but there has been a significant increase in the number of air quality alerts since it has become dryer. I think it deserves a look in relation to Muswellbrook.  2. The erosion on the eastern emplacement area is not acceptable in my mind. The emplacement slope is very steep. On the CCC tour we were told it would be dealt with at some point, but has not been yet.  3. Weed management on site and in the adjacent land needs to be better managed.	 1. Environmental performance specifically in regards to air quality and greenhouse gas emissions is discussed in Section 3.7.2.  2. Erosion of the eastern out of pit emplacement area was inspected during the site inspection. A number of drainage lines within the rehabilitated area were noted as being eroded. EMM have included a recommendation in Chapter 4 and Appendix A to address the erosion issues identified during the site visit. MPO representatives were aware of erosion within the area and identified corrective measures proposed for the area.  3. It was noted during the site visit that weed management activities had fallen behind over the past 12 months due to difficulties in engaging contractors. This is a known issue. MPO have recently appointed a full-time contractor and are hoping to undertake additional work to get weed management back on track.

### 3.9 Complaints

A summary of the complaints received over the IEA period are outlined in Table 3.6.

**Table 3.6**      **Summary of complaints**

Aspect	2020 (after 27/2/2020)	2021	2022	2023 (up to 8/3/2023)
Noise	51	71	28	1
Air quality	14	19	1	2
Blasting	19	5	2	0
Lighting	14	15	1	3
Spontaneous combustion	2	6	3	0
Other	0	2	0	0

All complaints were satisfactorily followed up in accordance with the complaints management strategy outlined in Section 5.4 and Figure 6 of the Environmental Management Strategy (EMS).

In accordance with Schedule 5, Condition 11 of Development Consent DA 92/97, a summary of all complaints are uploaded to the MPO website.

### 3.10 Incidents

Table 3.7 provides a summary of the environmental incidents which occurred during the Audit period.

All incidents were reported in accordance with Schedule 5, Condition 7 of Development Consent DA 92/97 and Condition R2 and R3 of EPL 20850.

**Table 3.7 Incidents**

Date	Incident	Action
15/6/20	<p><b>Blast fume event</b></p> <p>A blast fume event occurred after a blast with three complaints received after the blast. Post firing, a visible fume plume was emitted from the blast. The fume was classified as level 3 at 500 m from the blast location and as a level 2 as the emission dissipated towards the site boundary in a south-easterly direction.</p>	<p>MPO completed an investigation into the cause of the incident and reported the incident to the DPE and EPA. The mining contractor amended key pre-blast procedures to reduce the potential for a similar event to occur in the future. This included adjustment of the fume probability prediction model, additional surveillance cameras/drones and updates to the blasting Trigger Action Response Plan (TARP). MPO received and paid a penalty infringement notice for the incident.</p>
21/1/21	<p><b>MOD 4 out of hours construction works</b></p> <p>As part of the MOD 4 construction works located outside of the mining lease boundary, a concrete pour continued past 6:00 pm to ensure the engineering structural integrity of the MOD 4 rail loop viaduct pillar.</p> <p>No heavy vehicles (including the concrete agitator truck) were working after 6:00 pm.</p> <p>No real-time noise alarms or noise complaints received during the event. No adverse noise impacts to the surrounding community were observed and no environmental harm occurred due to the activity.</p>	<p>The incident was reported to DPE on 22/1/2021.</p> <p>MPO completed an investigation of the incident and submitted the investigation report to DPE on 5/2/2021. A warning letter was issued by DPE to MPO on 19/2/2021.</p> <p>MPO have since implemented additional measures to reduce the risk of reoccurrence of unauthorised out of hours works.</p> <p>An Out of Hours Work Protocol (OHWP) was approved by DPE on 15/3/2021.</p>
8/3/21	<p><b>Water discharge event</b></p> <p>Intense rainfall occurred (14.8 mm in a 50 minute period) and an environmental inspection was completed immediately following the rainfall event which identified a small section of erosion and sediment controls that had been impacted by the event. There was evidence that runoff had travelled downstream through an active construction area, into the Wybong Road reserve and through further sediment controls before reporting to the Wybong Road swale drain where the sediment ceased. No environmental harm occurred and no complaints were received.</p>	<p>MPO completed an investigation into the cause and reported the incident to the DPE and EPA. Reinstatement of erosion and sediment controls were undertaken on the same day.</p> <p>Regular inspections of erosion and sediment controls were implemented and undertaken prior to and during forecasted heavy rainfall events, in addition to a regular third party inspections by a CPESC.</p>
31/3/21	<p><b>MOD 4 out of hours construction works</b></p> <p>As part of the MOD 4 construction works located outside of the mining lease boundary, a concrete pour occurred past 6:00 pm. This occurred prior to notifying the nearby residents, as required by the OHWP.</p> <p>Attended noise monitoring was undertaken at two representative locations during the works, which indicated that the construction noise levels complied with all relevant consent and EPL conditions.</p> <p>No environmental harm occurred and no complaints were received.</p>	<p>MPO completed an investigation into the cause of the incident and reported the incident to the DPE.</p> <p>The OHWP, including the requirement for notification, was recommunicated to the team.</p>

**Table 3.7 Incidents**

Date	Incident	Action
8/6/21	<p><b>Water discharge event</b></p> <p>Intense rainfall occurred (28.3 mm) which resulted in two separate discharges of sediment-laden water from MOD 4 construction area into Wybong Road swale drains, where it ceased.</p> <p>The water discharge was confined to the Wybong Road upgrade construction area and road reserve within the MPO Development Consent DA 92/97 boundary.</p> <p>There were no adverse impacts to the surrounding community or any environmental harm due to the two water discharges. No complaints were received.</p>	<p>MPO completed an investigation into the cause and reported the incident to the DPE and EPA. Reinstatement of erosion and sediment controls were undertaken as soon as practicable.</p> <p>Water quality monitoring was undertaken in accordance with the Water Management Plan. Regular inspections of erosion and sediment controls were implemented and undertaken prior to and during forecasted heavy rainfall events, in addition to regular third party audits by a CPESC.</p> <p>DPE confirmed in writing on 9/7/2021 that no further action was required.</p>
11/6/21	<p><b>Elevated EC surface water levels</b></p> <p>Elevated EC readings at surface water monitoring site W17 was recorded on three consecutive monitoring rounds in April, May and June 2021.</p>	<p>MPO completed all steps outlined in Section 3.1.1 of the Surface and Ground Water Response Plan (Appendix 5 of the WMP). The investigation indicated that the elevated EC levels at site W17 was not attributed to MPO activities.</p> <p>DPE confirmed in writing that no further action was required.</p>
27/8/21	<p><b>Noise exceedance</b></p> <p>Attended monitoring identified a sustained exceedance (measurements at 00:18 and 00:54) of the <math>L_{A1(1 \text{ minute})}</math> criterion at monitoring location N-AT4.</p> <p>No environmental harm nor known impacts on the amenity of nearby residences occurred.</p>	<p>MPO notified the DPE and EPA of the incident on 1/9/2021. MPO also notified (in writing) the affected landowners and tenants of the potential exceedance.</p> <p>MPO followed the NMP procedure and modified operations upon notification of the exceedance. MPO completed additional <math>L_{A1(1 \text{ minute})}</math> monitoring rounds closer to the affected landowners and tenants during September – November 2021.</p> <p>A warning letter was received from DPE for non-compliance on 24/11/2021.</p> <p>The outcomes of the additional monitoring were communicated to DPE and the affected landowners and tenants in December 2021. No notification from DPE was received after the correspondence letter in December 2021.</p>

**Table 3.7 Incidents**

Date	Incident	Action
12/11/21	<p><b>Water discharge event</b></p> <p>Intense rainfall occurred (41mm in a 5 hour period) which resulted in a discharge of sediment-laden water from the Rail 2 Project Area into Wybong Road swale drains.</p> <p>The water discharge was confined to the Wybong Road upgrade construction area and road reserve within the MPO Development Consent DA 92/97 boundary.</p>	<p>MPO completed an investigation into the cause and reported the incident to the DPE and EPA.</p> <p>Water quality sampling was undertaken during the event, with water quality showing negligible changes in release water in pH, EC and TSS.</p> <p>Reinstatement of erosion and sediment controls were undertaken as soon as practicable (same day).</p> <p>Regular inspections of erosion and sediment controls were implemented and undertaken prior to and during forecasted heavy rainfall events, in addition to regular third party audits by a CPESC.</p> <p>There were no adverse impacts to the surrounding community or any environmental harm due to the water discharge. DPE confirmed that no further action was required on 7/12/2021.</p>
8/12/21	<p><b>Water discharge event</b></p> <p>Intense rainfall occurred (24.2 mm in a 30 minute period with a total of 47.8 mm in a 9 hour period) causing four sediment basins (SD 4, 6 and 7 and ED 2) to spill water offsite.</p> <p>The initial investigation indicated that no environmental harm occurred. No complaints were received.</p>	<p>MPO completed an investigation into the cause and reported the incidents to the DPE and EPA.</p> <p>Water quality sampling was undertaken during the events, with water quality showing negligible changes in release water in pH, EC and TSS.</p> <p>MPO completed actions to mitigate the impact of discharges prior to the rainfall event, including regular inspections and dewatering of sediment dams through pumping to the mine water system.</p> <p>Immediate actions following the incidents included pumping of the dams to reduce the quantity and duration of the discharge event. Pumping had already commenced at 3 of the 4 dams prior to the event.</p> <p>Regular inspections of erosion and sediment controls were implemented and undertaken prior to and during forecasted heavy rainfall events, in addition to regular third party inspections by a CPESC.</p> <p>Final outcomes of the investigation include increased capacity of the dams and increased pumping capacity.</p>
9/12/21	<p><b>Water discharge event</b></p> <p>Intense rainfall occurred (47.8 mm with a 1 in 10 year event triggered) causing four sediment basins SD 4, 6 and 7 and ED 2 to spill water offsite.</p> <p>The initial investigation indicated that no environmental harm occurred. No complaints were received.</p>	

**Table 3.7 Incidents**

Date	Incident	Action
8/3/22	<p><b>Water discharge event</b></p> <p>Discharge of sediment laden water from SD 1, 4, 6 and 7, and TSB 2 as the surface water run off to the dams exceeded the dam's respective design capacities.</p>	<p>MPO completed an investigation into the cause and advised DPE of the non-compliance on 15/3/2022. During the incident, MPO pumped water from the sediment dams to the mine water system to reduce the volume and duration of the overflow.</p> <p>DPE confirmed in writing on 20/4/2022 that no enforcement action would be taken as the incident resulted in minimal impact on the environment and remedial actions were in place to minimise the recurrence and impact of similar incidents.</p> <p>In accordance with Schedule 5, Condition 4, of the Development Consent DA 92/97, the WMP was updated on 24/10/2022 following completion of an internal review.</p>
6/5/22	<p><b>Spontaneous combustion event</b></p> <p>A complaint was received in relation to spontaneous combustion. The complaint received directly to the External Relations Manager's mobile phone.</p> <p>The area in question was continually inspected, with dozers tasked to cover the heated area with inert material. The area has since been covered and the event eliminated.</p>	<p>Upon receiving the complaint, the operation was inspected with an area of heated material identified on the Pit A low wall. During the inspection it was determined that accessing the heated material was a high-risk activity and a detailed risk assessment was conducted to work above a large body of water.</p> <p>Upon completion of the risk assessment, a dozer was used to cut down the low wall to cover the heated material with inert material. This occurred on 10/5/2022.</p> <p>Heated material within the active working areas will continue to be managed in accordance with the Spontaneous Combustion Principal Hazard Management Plan.</p>
2/9/22	<p><b>Blast overpressure exceedance</b></p> <p>An elevated blast overpressure reading was recorded at monitoring site B-VOA after a blast event. Although an elevated reading did occur at monitoring site B-VOA, the elevated overpressure result was not an exceedance of its operating condition in either the Development Consent DA 92/97, EPL 20850 or the BMP, as there are no privately owned residences in the area of B-VOA.</p> <p>There were no community complaints as a result of the incident. No blast fume events occurred during the reporting period.</p>	<p>MPO completed an investigation into the cause and reported the incident via email on the same day to DPE and EPA. A report was provided on 9/9/2022.</p> <p>From the investigation, MACH Energy notes that the elevated overpressure result is not an exceedance of its operating condition in either the Development Consent DA 92/97, EPL 20850 of the BMP, as there are no privately owned residences in the area of B-VOA.</p> <p>DPE advised on 30/9/2022 that MPO should review blast procedures.</p> <p>An EPL 20850 Variation occurred on 28/2/2023 to remove blast monitoring point 12 (B-VOA).</p> <p>Blast procedures were reviewed, and no changes were necessary as the results are used primarily for information and risk management purposes. Residential receivers to the north and east have existing monitors in place.</p>



**Table 3.7 Incidents**

Date	Incident	Action
21/10/22	<p><b>Water discharge event</b></p> <p>A spillway discharge was observed from SD 4. A possible 1 in 5 year event was triggered, with MPO receiving 9.2 mm of rain within a 5–10 minute period.</p> <p>The receiving environment is the Kayuga Road Culvert and Hunter River Flood Catchment.</p>	<p>MPO completed observation and field measurements of water quality during the discharge event at all dams.</p> <p>The results of the preliminary investigation indicate there were no adverse impacts to the surrounding community or any environmental harm due to the water release.</p> <p>MPO commenced an investigation into this event and provided outcomes to EPA on 28/10/2022.</p> <p>From the investigation, field observations during the release event, laboratory analytical data, and Hunter River Water Quality/flow levels at the time of the rainfall event provide supporting evidence to indicate there was no adverse impact to the local community or receiving environment because of the water release.</p> <p>The DPE requested a review of all sediment dam discharges a part of this IEA. This is discussed in Section 2.6.</p>
17/11/22	<p><b>Noise exceedance</b></p> <p>Attended monitoring identified a sustained exceedance (at 00:11 and 00:42) of the <math>L_{A1(1 \text{ minute})}</math> criterion at N-AT4. Track noise from MPO at N-AT4 caused exceedances of the <math>L_{A1,1 \text{ minute}}</math> criterion by up to 16 dBA. Elevated <math>L_{A1(1 \text{ minute})}</math> results were also measured at N-AT5 (49 dBA).</p> <p>MACH Energy considers that the duration of the non-compliance was short and not indicative of a sustained non-compliance with the relevant criteria. Additional attended noise monitoring throughout winter 2022 has indicated continued compliance, in addition to the regular compliance monitoring conducted and reported, and this outcome is supported by a reduction in complaints received year-to-date.</p> <p>No complaints were received in the night-time period of the elevated reading and no complaints were received from residents within the potentially impacted noise assessment group (NAG 7) in which N-AT4 is located.</p>	<p>Additional attended monitoring was commissioned and subsequent readings at N-AT5 returned measurements below the relevant noise criteria.</p> <p>As a result of the noise exceedance event at N-AT4, consultation with the affected landowners and tenants was conducted. In addition, MPO completed:</p> <ul style="list-style-type: none"> <li>• extended attended noise monitoring for up to three months to include measurements closer to the area of residence most likely to be impacted</li> <li>• notification (in writing) the affected landowner(s) and tenants of the potential exceedance and extended monitoring period</li> <li>• communication of results of the extended noise monitoring period (in writing) to the DPE and affected landowners and tenants following completion of the additional monitoring.</li> </ul> <p>MPO followed the NMP procedure and no environmental harm nor known impacts on the amenity of nearby residences occurred.</p>

### 3.11 Actual verses predicted environmental impacts

The 2020, 2021 and 2022 annual reviews were reviewed in order to undertake an assessment of the compliance between actual and predicted impacts documented in relevant environmental assessments, 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 EP&A Act.

The annual reviews confirm the physical extent of MPO lies within the approved boundary.

Section 3.10 outlines environmental incidents which occurred during the audit period, as outlined in annual reviews. The noise, water and blast incidents, outlined in Section 3.910, demonstrate actual off-site impacts have been identified in excess of predicted environmental impacts. Section 3.15 confirms corrective actions taken by MPO to reduce the risk of reoccurrence. Recommendations are made within this audit, see Chapter 4, to address any further non-compliances identified as part of this audit.

It is noted that DPE requested a comparison of the actual annual greenhouse gas emissions generated during the audit period against the predictions in the environmental assessment be undertaken. The outcomes of this assessment are outlined in Section 3.8.

### 3.12 Site inspection

Areas inspected during the site inspection are identified within Section 2.5, with evidence collected through the site inspection summarised below.

#### i MIA

Inspection of the MIA was undertaken by the lead auditor and assistant auditor under escort by MPO representatives. The inspection included the site offices, carpark, workshop, wash down bays, store and fuel bay. The inspection demonstrated that the MIA was maintained generally in accordance with approved management plans, being well organised and positive segregation of waste streams. Hydrocarbon and chemical storage vessels were identified outside appropriately bunded areas and hydrocarbon spills were evident.

Photographs taken during the inspection of the MIA area available within Appendix F, specifically Photographs F.76 to Photograph F.107.

#### ii CHPP and associated infrastructure

Inspection of the CHPP was undertaken by the lead auditor and assistant auditor under escort by MPO representatives. The inspection included the Run of Mine (ROM) pad, ROM hopper, CHPP and associated laydown areas.

The inspection demonstrated that the CHPP and associated infrastructure was maintained generally in accordance with approved management plans, being well organised and maintained. Hydrocarbon and chemical storage vessels were identified outside appropriately bunded areas. Dust controls were in place including water cart and sprays at the ROM pad and ROM hopper at the time of inspection.

Photographs taken during the inspection of the CHPP and associated infrastructure area available within Appendix F, specially Photograph F.61 and Photograph F.69.

#### iii Stage 1 rail infrastructure area

Inspection of the stage 1 rail infrastructure area was undertaken by the lead auditor and assistant auditor under escort by MPO representatives. The inspection included viewing the area from the Bengalla Road bridge and the Wybong Road bridge.

The inspection demonstrated that the stage 1 rail infrastructure had been removed, as per DA 92/97, and adequately rehabilitated to the satisfaction of Bengalla Mining Company.

Photographs taken during the inspection of the stage 1 rail infrastructure area are available within Appendix F, specifically Photograph F.37.

#### iv Stage 2 rail infrastructure area

Inspection of the stage 2 rail infrastructure area was undertaken by the lead auditor and assistant auditor under escort by MPO representatives. The inspection included the rail viaduct, rail bridge over Wybong and Overton roads, new rail loop, visual screening, train load out (TLO) facility, the new overland conveyor and sediment control structure located along the rail alignment.

The inspection demonstrated stage 2 rail infrastructure area was maintained generally in accordance with approved management plans, being well organised and maintained. No matters in conflict with approved management plans were identified.

#### v Active mining areas including South Pit, Central Pit and North Pit

Inspection of the South Pit, Central Pit and North Pit was undertaken by the lead auditor and assistant auditor under escort by MPO representatives.

The inspection demonstrated that mining activities within the South Pit, Central Pit and North Pit was undertaken generally in accordance with approved management plans. At the time of inspection, active mining activities were located within the Central Pit, with overburden being extracted and dumped in the eastern out of pit emplacement area. Drilling was being undertaken approximately one strip to the west of the active mining area. Mulching and topsoil removal was not being undertaken at the time of inspection, however a previously cleared area prepared for mining activities was sighted, east of drilling activities.

At the time of inspection visible dust was evident at mining, dumping and drilling activities. MPOs dust control trigger action response plan was enacted by operational personal in accordance with the AQGHGMP.

Photographs taken during the inspection of the South Pit, Central Pit and North Pit are available within Appendix F, specifically Photographs F.1 to Photograph F.9.

#### vi Eastern out of pit emplacement area

Inspection of the eastern out of pit emplacement area was undertaken by the lead auditor and assistant auditor under escort by MPO representatives. The area was also inspected by the biodiversity management and offsetting technical expert as the area has been subject to rehabilitation activities.

The inspections demonstrated that progressive rehabilitation of the area has commenced, with final bulk shaping being undertaken during the inspection. Rehabilitation having commenced in 2018, was sighted to be in the early stages of development and demonstrated good establishment of target species in accordance with approved management plans. It is noted that weed cover across the eastern out of pit emplacement area was identified to be quite high with high-threat weed cover. In addition, a number of drainage lines within the rehabilitated area were significantly eroded.

Photographs taken during the inspection of the eastern out of pit emplacement area are available within Appendix F, specifically Photograph F.28 and F.30.

#### vii Sediment dams (SDs) 1, 3, 4, 6, 7 and 8

Inspections of the SDs 1, 3, 4, 6, 7 and 8 were undertaken by the lead auditor and assistant auditor under escort by MPO representatives.

The inspections demonstrated that SDs were being operated in accordance with approved management plans. Evidence of active management of sediment load and water levels within the SDs were sighted. SDs were also equipped with dewatering infrastructure. The lead auditor was provided evidence of daily inspections of all SDs.

Photographs taken during the inspection of the sediment dams are available within Appendix F, specifically Photograph F.32, Photograph F.27 and Photograph F.33.

#### viii Fines emplacement area

Inspection of the fines emplacement area was undertaken by the lead auditor and assistant auditor under escort by MPO representatives.

At the time of inspection, significant construction activities were being undertaken including the lift of the embankment and excavation of the fines emplacement to increase overall volume and provide material for the embankment lift. A clean water diversion, constructed prior to the noted activities, was sighted.

The inspection demonstrated that activities within the fines emplacement area were occurring in general accordance with approved management plans and DA 92/97. General construction activities, including excavation and material movement, had dust controls in place with a water cart operating within the area.

The clean water diversion drain and areas disturbed to facilitate the drain had been recently seeded with cover crop species presenting at the time of inspection. Sediment and erosion control structures, including sediment fencing and rock lined structures, did require maintenance. Noting that sediment laden water, at the time of inspection, reported either to ED2 or the fines emplacement and not offsite.

Photographs taken during the inspection of the fines emplacement area are available within Appendix F, specifically Photograph F.40 to Photograph F.50.

#### ix Water storages – ED2 and Mine Water Dam

Inspection of water storages ED2 and Mine Water Dam was undertaken by the lead auditor and assistant auditor under escort by MPO representatives.

The inspection demonstrated that the water storages were being operated in accordance with approved management plans.

During the site inspection, it was noted that ED2 was operating as mine water dam and was also relied upon as a sediment control structure, providing sediment control for the western side of the fines emplacement embankment.

Photographs taken during the inspection of ED2 are available within Appendix F, specifically Photograph F.53.

#### x Biodiversity management and rehabilitation

EMM's biodiversity management and offsetting technical specialist, Nathan Garvey, completed his site inspection on 7 March 2023. The inspection included the rehabilitated areas of the eastern out of pit emplacement area, relocation sites of orchids, pre-clearing activities and the salvage and reuse of habitat features within rehabilitated areas.

### 3.13 Site interviews

The audit site interviews were completed by the EMM audit team on 7–8 March 2023. In addition, interviews were conducted by the appointed biodiversity management and offsetting technical specialist on 7 March 2023. Interviews were conducted with MPO staff to verify compliance with relevant conditions. A summary of interviews conducted is outlined in Table 3.8.

**Table 3.8**      **Site interviews summary**

Name	Position	Interview matters
Andrew Reid	Environment Superintendent	<ul style="list-style-type: none"> <li>• Overview of operational management systems to ensure environmental compliance.</li> <li>• Discussion on and provision of evidence to demonstrate compliance with relevant Development Consent, EPL, Mining leases and water license conditions.</li> <li>• Discussion on and provision of evidence to demonstrate suitable corrective actions in regard to prior audit findings.</li> <li>• Discussion on and provision of evidence in regard to preliminary non-compliances identified prior to the site visit and receipt of data.</li> <li>• Overview of activities undertaken during the audit period.</li> </ul>
Mariah Lane	Environment Advisor	<ul style="list-style-type: none"> <li>• Overview of operational management systems to ensure environmental compliance.</li> <li>• Overview of how compliance conditions in regard to Aboriginal cultural heritage are satisfied.</li> <li>• Overview of environmental compliance data.</li> <li>• Overview of rehabilitation and biodiversity management practices.</li> </ul>
Scott Grunsell	Environment Advisor	<ul style="list-style-type: none"> <li>• Overview of how MPO ensured compliance with Development Consent conditions relevant to Stage 2 infrastructure. Inclusive of demonstrating compliance with the Construction Environmental Management Plan.</li> <li>• Overview of MPO coal handling and transport processes.</li> </ul>
Craig Hawkins	Project Lead	<ul style="list-style-type: none"> <li>• Overview of MPO operational water management systems.</li> <li>• Confirmation of actions taken to reduce the risk of discharge events in response to water discharge incidents during the audit period.</li> <li>• Discussion on proposed improvements to sediment and erosion control structures.</li> </ul>
Peter York	Environment and Community Superintendent	<ul style="list-style-type: none"> <li>• Overview of operational and management systems to ensure environmental compliance.</li> <li>• Overview of complaint management process and internal procedures to address.</li> <li>• Overview of rehabilitation and mining activities in accordance with relevant approval conditions.</li> <li>• Overview of biodiversity management practices.</li> <li>• Overview of GDP procedures.</li> <li>• Overview of MPO operational water management systems.</li> </ul>

## 3.14 Improvement opportunities

### 3.14.1 Noise, blast and vibration

Bridges Acoustics noted a number of improvement opportunities in their report (Appendix E).

In relation to the independent noise consultant's monitoring procedures and reports:

- Incorrect sound level meter calibration procedure. A Class 2 calibrator was used on a Class 1 sound level meter in all noise surveys, contrary to relevant standards.
- An invalid sound level meter calibration certificate, as it was issued after the date of the noise survey, was included in the January 2021 noise monitoring report.
- Instrument calibration certificates were not included in the April 2022 noise monitoring report.

These additional issues do not imply the noise levels reported by the consultant include significant errors or inaccuracies. A recommendation was made to annually review the noise monitoring consultant's procedures to ensure consistency with all relevant standards.

Condition R5.2 requires an annual report, prepared by a qualified acoustic consultant, to include monitoring data and other specified information and be submitted to the EPA. While the EPA has access to noise monitoring data in the monthly monitoring reports and Annual Reviews, those documents are not prepared by a qualified acoustic consultant and do not satisfy this condition. MPO are recommended to commission a noise monitoring report annually to satisfy this condition.

### 3.14.2 Air quality and greenhouse gas emissions

Air quality and greenhouse gas emissions data appears to be generally collected and presented in a logical manner.

The main point of improvement is related to clarity of information or data. For example, the categorisation of complaints (in particular odour complaints) in the complaints register and how this corresponds to that presented in the Annual Reports.

The documentation of updates and review of the AQGHGMP should also be improved. Or where there has not been an update or review, the reason should be stated.

As previously noted, GHG emissions increased in 2022 compared to 2021. Whilst the main reason is likely to be the increase in ROM coal extraction in 2022, reasoning or analysis of this increase has not been provided. It is also unclear whether GHG control measures have been reviewed and analysed for effectiveness particularly given the increase in emissions. The Annual Reports could be improved to provide more information related to this.

### 3.14.3 Biodiversity management and rehabilitation

Biodiversity management and rehabilitation activities at MPO demonstrated to occur largely in accordance with DA 92/97 and the relevant management plans.

Increased focus on weed management within rehabilitated areas and land under MPO management should be improved, minimising the risk of further establishment of high risks weeds both on MPO and neighbouring properties. This has been recognised by MPO who have directly employed a weed management officer. It is recommended that this position be maintained into the future.

Erosion within drainage channels within rehabilitated areas was observed during the site inspection. It is acknowledged that extreme weather events have contributed to the level of erosion. However, it is recommended that drainage channels be repaired to reduce further erosion from high rainfall events as rehabilitated areas mature.

### 3.14.4 Water management

Water storage ED2 is currently operated as mine water dam, however it also acts as the sediment control structure west of the fines emplacement area. It is recommended that ED2 be managed to ensure adequate freeboard is maintained, relevant to the catchment, in order to reduce the risk of future water discharge events. It is noted that during the heavy rainfall events within the audit period, no discharge occurred from ED2. However, given the changing catchment conditions as result of works to the fines emplacement area, the EMM audit team identifies this as potential risk. It is recommended MPO undertake an assessment of the catchment size and determine the appropriate freeboard required for ED2 to provide adequate protection against discharge events, consistent with other sediment and erosion control dams located at MPO.

As identified in Section 3.13, MPO noted proposed improvements to sediment control structure telemetry including improved camera network and dam height monitoring, providing an additional control to physical inspections. It is recommended that this is implemented to further reduce the risk of discharge events.

#### 3.14.5 Waste

A number of 1,000 L pods located around the CHPP and MIA laydown areas (some full, some mostly empty) with oil and other chemicals were observed outside of appropriate storage areas during the site inspection.

It is recommended that all chemicals/hydrocarbons are appropriately stored in bunded areas.

### 3.15 Key strengths

Key strengths of MPOs environmental management and performance identified during the audit are identified in the following sections.

#### 3.15.1 Noise, blast and vibration

Bridges Acoustics notes the NMP is consistent with current best practice, concluding that MPO has been operated and managed in a competent manner from an acoustic perspective.

#### 3.15.2 Air quality and greenhouse gas emissions

MPO appears to be implementing their dust mitigation measures on-site as stated in their AQGHGMP. Whilst there was evidence of one visual dust event at the audit site inspection, mitigation (water sprays) was promptly put in place to reduce the dust as much as possible. The meteorological forecasting system also appears to be working as intended.

While some points of clarification are required in the data collection systems (as previously noted), air quality monitoring data is generally presented in a logical and clear manner (as attached to the Annual Returns) and is labelled in accordance with the requirements.

#### 3.15.3 Biodiversity management and rehabilitation

MPOs established rehabilitation has demonstrated to be highly successful, with rehabilitation monitoring demonstrating progress towards completion criteria. The inclusion of stag trees and other habitat features within the early stages of rehabilitation is noted to best practice. MPO is also engaging with universities to further improve rehabilitation outcomes specifically in regard to soil erosion and use of alternative mediums (including tailings). The outcomes of which will improve future rehabilitation planning and implementation.

#### 3.15.4 Waste

MPOs segregation of waste streams was noted as a key strength during the site inspection. A number of waste bins of numerous types (i.e. general, steel, paper, oily rags, etc.) were inspected during the audit, with no misplaced waste identified.

## 4 Recommendations

### 4.1 Non-compliances

Details of all non-compliances associated with this 2023 IEA can be found in Section 3.4. Where a non-compliance was identified, a recommendation for improvement was made. This is detailed below in Section 4.2.

### 4.2 Opportunities for improvement

Table 4.1 lists the recommendations made as part of the 2023 IEA.

**Table 4.1 Recommendations**

Recommendation number	Recommendations
REC 1	A Class 1 calibrator must be used with a Class 1 sound level meter for noise monitoring. Ensure all calibration certificates are included in consultants reports.
REC 2	Complaints registers and Annual Reviews should be consistent in stating odour complaints (e.g. 2022 Annual Reviews mentions three odour complaints but these are not listed as 'odour' in the 2022 complaints register but rather, refer to spontaneous combustion and the 'nature of complaint' is 'other').
REC 3	MACH Energy should ensure that odour and fume management conditions per Section 9.5 of the AQGHGMP are reviewed for effectiveness, updated where necessary and are being implemented effectively following staff education and training.
REC 4	MACH Energy should ensure that temperature lapse data is collected, stored and presented for audit purposes.
REC 5	Ensure corrective actions as per the investigations of incident events are implemented.
REC 6	It was noted during the site visit that weed management activities had fallen behind over the past 12 months due to difficulties in engaging contractors. This is a known issue. Thiess have appointed a full-time contractor and are hoping to undertake additional work to get weed management back on track.
REC 7	Adopt appropriate noise criteria for any out-of-hours construction work. Appropriate criteria are generally identical to usual MPO noise criteria unless alternative criteria are agreed with EPA/DPE.
REC 8	Ensure all chemicals/hydrocarbons are appropriately stored in bunded areas.
REC 9	Update Table 2-1 of the RMP to include Schedule 3, Condition 54 of DA 92/97.
REC 10	Update RMP to make reference to the Annual Rehabilitation and Forward Work Program to address the requirement of the RMP to include an indicative schedule.
REC 11	Address erosion issues within the rehabilitation areas which were observed during the site visit.
REC 12	Show EPL Point 14 and 15 on a figure in Water Management Plan.
REC 13	Implement diligent noise management practises to avoid exceedances of the noise criteria.
REC 14	Ensure the blast monitoring locations are regularly reviewed and represent closest privately owned receivers.
REC 15	Review measures in the Blast Management Plan and the AQGHGMP for effectiveness and ensure these are being implemented on site.
REC 16	Use 'Consultation Manager' internal system to track all complaints and manage follow up.



**Table 4.1**      **Recommendations**

Recommendation number	Recommendations
REC 17	Site personnel to ensure that water sprays on materials/when loading or unloading materials are being applied per the AQGHGMP to minimise dust during tipping as far as possible. The measures in the AQGHGMP relating to this should be reviewed for effectiveness.
REC 18	MPO to test PIRMP at least once prior to January 2024 and annually thereafter.
REC 19	Include the waste management requirements of EPL 20850 Condition O6.1 in the Thiess Mount Pleasant Handling and Disposal of Waste Procedure.
REC 20	Complete quarterly faecal and pH monitoring in line with the obligations of the EPL Condition M2.3.
REC 21	The 2021 met data spreadsheet should be amended if there is not actually a TEOM on-site. The monitoring equipment should be clear in all spreadsheets going forward.
REC 22	Noise Compliance Assessment Reports are to be prepared by an appropriately qualified acoustic consultant.

## 5 Conclusion

The audit team was endorsed as a suitably qualified, experienced and independent team of experts by the DPE to conduct an audit of MPO under DA 92/97.

The audit was conducted by Thomas Frankham (Lead Auditor Certification No. 207528) and assisted by Samantha Hayes and Bret Jenkins of EMM. The audit was informed by technical experts Mark Bridges in regard to noise, blasting and vibration, Scott Fishwick and Francine Manansala in regard to air quality and greenhouse gas emissions, and Nathan Garvey in regard to biodiversity management and rehabilitation.

A site inspection of MPO was completed over two days on 7 and 8 March 2023, attended by Thomas Frankham and Samantha Hayes, and Nathan Garvey who attended the inspection on 7 March 2023.

The Audit assessed compliance against the following:

- Development Consent DA 92/97 and the statement of commitments
- Environment EPL 20850
- MLs 1645, 1708, 1709, 1713, 1750 and 1808
- water licences
- Annual Reviews for 2020, 2021 and 2022
- environmental management plans (required under DA 92/97)
- non-compliances of the 2020 IEA.

The Audit consisted of a detailed desktop review, consultation with relevant agencies and the CCC, interviews with MPO staff, and a site inspection. The Audit was conducted in accordance with Schedule 5, Condition 9 of DA 92/97.

The audit identified 204 compliance conditions, of which the majority (78%) were found to be in compliance, 12% were found to have not been triggered and 10% were identified as non-complaint. EMM has identified corrective actions to address non-compliances, as well as opportunities for improvement of the environmental performance of MPO. In addition, key strengths have been identified for consideration in regard to environmental performance.

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# Appendix A

## Independent Audit Table

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Table A.1 - Development Consent DA 92/97

Section	Requirement	Audit team responsible for condition	Evidence collected	Independent Audit Findings and Recommendations	Compliance status	Unique Identification Non-compliance
SCHEDULE 2 - ADMINISTRATIVE CONDITIONS						
OBLIGATION TO MINIMISE HARM TO THE ENVIRONMENT						
1	In addition to meeting the specific performance measures and criteria established under this consent, the Applicant must implement all reasonable and feasible measures to prevent, and if prevention is not reasonable and feasible, minimise, any material harm to the environment that may result from the construction and operation of the development, and any rehabilitation required under this consent.	EMM general audit team	EMM did not note any permanent environmental harm during the site inspection.	No material and environmental harm occurred during the audit period.	Compliant	
TERMS OF CONSENT						
2	The Applicant must carry out the development: (a) generally in accordance with the EIS, EA (MOD 1), EA (MOD 2), EA (MOD 3), EA (MOD 4) and project layout plans; and (b) in accordance with the Statement of Commitments and conditions of this consent. <i>Notes:</i> • The project layout plans are shown in Appendix 2. • The Statement of Commitments is reproduced in Appendix 3	EMM general audit team	EIS, EA (MOD 1), EA (MOD 2), EA (MOD 3), EA (MOD 4). Project layout plans. Statement of Commitments.	The development was carried out in accordance with the approvals and Statement of Commitments.	Compliant	
3	Consistent with the requirements in this consent, the Secretary may make written directions to the Applicant in relation to: (a) the content of any strategy, study, system, plan, program, review, audit, notification, report or correspondence submitted under or otherwise made in relation to this consent, including those that are required to be, and have been, approved by the Secretary; and (b) the implementation of any actions or measures contained in any such document referred to in condition 3(a).	EMM general audit team	No written direction from the Secretary received.	EMM did not identify any inconsistencies with the requirements of the consent during the audit period.	Not triggered	
4	The conditions of this consent and directions of the Secretary prevail to the extent of any inconsistency, ambiguity or conflict between them and a document/s listed in condition 2(a) above. In the event of an inconsistency, ambiguity or conflict between any of the document/s listed in condition 2(a) the most recent document prevails to the extent of the inconsistency, ambiguity or conflict.	EMM general audit team	Management plans and DPE approval of management plans.	All management plans have been approved by DPE with correspondence attached the each management plan.	Compliant	
LIMITS ON CONSENT						
Mining Operations						
5	The Applicant may carry out mining operations on the site until 22 December 2026. <i>Note: Under this consent, the Applicant is required to rehabilitate the site and carry out additional undertakings to the satisfaction of both the Secretary and the Resources Regulator. Consequently this consent will continue to apply in all other respects - other than the right to conduct mining operations - until the rehabilitation of the site and these additional undertakings have been carried out satisfactorily.</i>	EMM general audit team	N/A	Audit period is prior to 22 December 2026.	Compliant	
Coal Extraction						
6	The Applicant must not extract more than 10.5 million tonnes of ROM coal from the site in a calendar year.	EMM general audit team	Annual Reviews for 2020, 2021 and 2022.	As reported in the Annual Reviews; 2020: 8.54 Mt 2021: 10.07 Mt 2022: 9.99 Mt Based on the extraction volumes reported in the Annual Reviews, MPO was compliant.	Compliant	
Coal Transport						
7	Product coal may only be transported from the site by rail.	EMM general audit team	Train haulage data. Annual Reviews for 2020, 2021 and 2022.	As reported in the Annual Reviews, product coal was transported from the site by rail only.	Compliant	
8	The Applicant must ensure that train movements at the site (i.e. arrival or dispatch) do not exceed: (a) a maximum of 18 per day; or (b) 6 per day, averaged over each calendar year. <i>Note: In this condition, "day" means any 24-hour period.</i>	EMM general audit team	Train movement data and Annual Reviews for 2020, 2021 and 2022. 2020: Daily maximum = 12, annual average = 4 per day. 2021: Daily maximum = 12, annual average = 5 per day. 2022: Daily maximum = 12, annual average = 5-6 per day.	Based on the train movement numbers reported in the Annual Reviews, MPO was compliant.	Compliant	
STRUCTURAL ADEQUACY						
9	All new buildings and structures, and any alterations or additions to existing buildings and structures, that are part of the development, must be constructed in accordance with: (a) the relevant requirements of the BCA; and (b) any additional requirements of SA NSW where the building or structure is located on land within a declared Mine Subsidence District. <i>Notes:</i> • Under Part 6 of the EP&A Act, the Applicant is required to obtain construction and occupation certificates for the proposed building works. • Part 8 of the EP&A Regulation sets out the requirements for the certification of the development • The development is located in the Muswellbrook Mine Subsidence District. Under section 21 of the Coal Mine Subsidence Compensation Act 2017, the Applicant is required to obtain the Chief Executive of SA NSW's approval before carrying out certain development in a Mine Subsidence District.	EMM general audit team	Annual Reviews for 2020, 2021 and 2022. Construction certificates Occupancy certificates.	New construction reported as per Annual Reviews for 2020, 2021 and 2022.  During the site visit, EMM sighted construction certificates and occupancy certificates. All construction activities were outside of subsidence area.	Compliant	
DEMOLITION						
10	The Applicant must ensure that all demolition work on site is carried out in accordance with AS 2601-2001: <i>The Demolition of Structures</i> , or its latest version.	EMM general audit team	Complying development certificates for demolition. Seven demolition certificates from 23/10/2020. Seven demolition certificates from 14/05/2021. HAZMAT reports for: * Melody's Farm * 137 Kayuga Rd, Muswellbrook * Jandel, 401 Wybong rd EPA consignment waste disposal records for asbestos, contaminated soil, non-friable material. Asbestos sampling results.	EMM reviewed demolition certificates, HAZMAT reports and EPA waste disposal records for hazardous substances such as asbestos. These were all carried out in accordance with AS 2601-2001.	Compliant	
PROTECTION OF PUBLIC INFRASTRUCTURE						
11	Unless the Applicant and the applicable authority agree otherwise, the Applicant must: (a) repair, or pay the full costs associated with repairing, any public infrastructure that is damaged by the development; and (b) relocate, or pay the full costs associated with relocating, any public infrastructure that needs to be relocated as a result of the development, <i>Note: This condition does not include matters that are expressly provided for in the conditions of this consent, such as the maintenance of public roads.</i>	EMM general audit team	Annual Reviews for 2020, 2021 and 2022.	During 2020 and 2022, mine affected properties were vacated and their electricity was disconnected. This included removal of associated power poles and wires services. MPO incurred the full costs of these removals. There was no damage to public infrastructure in 2021.	Compliant	
OPERATION OF PLANT AND EQUIPMENT						
12	The Applicant must ensure that all plant and equipment used on site, or to transport coal from the site, is: (a) maintained in a proper and efficient condition; and (b) operated in a proper and efficient manner.	EMM general audit team	Sewage treatment plant weekly servicing reports (Booth Contracting). Sewage treatment plant monthly maintenance reports (Ozzi Kleen). Waste water treatment plant annual maintenance reports (Mak Water). Plant maintenance schedule. Thiess Plan Maintenance Procedure.	EMM reviewed the plant maintenance schedule. All new equipment coming to site is sound power level tested. Servicing is based on hours run/used.  The sewage/waste water system has been serviced appropriately and therefore maintained in a proper and efficient condition.  Thiess operate a Computerised Maintenance Management Systems (CMMS) to manage maintenance planning.	Compliant	
APPLICATION OF EXISTING STRATEGIES, PLANS OR PROGRAMS						
13	The Applicant must continue to apply existing management strategies, plans or monitoring programs approved prior to the approval of Modification 4, until the approval of a similar plan, strategy or program following the approval of Modification 4.	EMM general audit team	Register of management plan updates. Management plans. Letters to/from DPE.	MOD 5 was approved on 29 June 2022. DPE were notified on 29 August 2022 that no updates to management plans were required following the approval of MOD 5.	Compliant	
PLANNING AGREEMENT						
14	By the end of March 2012, unless otherwise agreed by the Secretary, the Applicant must enter into a planning agreement with Council in accordance with: (a) Division 6 of Part 4 of the EP&A Act; and (b) the terms of the Applicant's offer dated 14 February 2011, which is summarised in Appendix 4. This agreement must provide for annual payments to be made to Council with the first period for payment commencing upon the commencement of development on the site.	EMM general audit team	VPA agreement. Letter received from Muswellbrook Shire Council acknowledging contributions.	This was executed outside of the audit period. However, the VPA is still in place.	Compliant	

EVIDENCE OF CONSULTATION																																																																																																														
15	Where conditions of this consent require consultation with an identified party, the Applicant must: (a) consult with the relevant party prior to submitting the subject document to the Secretary for approval; and (b) provide details of the consultation undertaken including: (i) the outcome of that consultation, matters resolved and unresolved; and (ii) details of any disagreement remaining between the party consulted and the Applicant and how the Applicant has addressed the matters not resolved.	EMM general audit team	Management plans. Management plan approvals from DPE. Evidence of consultation with relevant parties for management plans. Construction Environmental Management Plan for MOD 4 construction works.	Consultation through the development of the management plans under the consent was completed and reported on in previous IEAs.  The Construction Environmental Management Plan for MOD 4 construction works was prepared in consultation with the EPA, Council, Telstra and Ausgrid.	Compliant																																																																																																									
COMPLIANCE																																																																																																														
16	The Applicant must ensure that all of its employees, contractors (and their sub-contractors) are made aware of, and are instructed to comply with, the conditions of this consent relevant to activities they carry out in respect of the development.	EMM general audit team	Induction and training processes.	EMM sighted induction presentations during the site inspection which identified environmental compliance matters. Note: Thiess, MACH and Sedgmen all have their own induction process.	Compliant																																																																																																									
APPLICABILITY OF GUIDELINES																																																																																																														
17	References in the conditions of this consent to any guideline, protocol, Australian Standard or policy are to such guidelines, protocols, Standards or policies in the form they are in as at the date of this consent. However, consistent with the conditions of this consent and without altering any limits or criteria in this consent, the Secretary may, when issuing directions under this consent in respect of ongoing monitoring and management obligations, require compliance with an updated or revised version of such a guideline, protocol, Standard or policy, or a replacement of them.	EMM general audit team	N/A	There has been no direction from the Secretary for any updates during the audit period.	Not triggered																																																																																																									
SCHEDULE 3 - ENVIRONMENTAL PERFORMANCE CONDITIONS																																																																																																														
ACQUISITION UPON REQUEST																																																																																																														
1	If the Applicant receives a written request for acquisition from the owner of any land listed in Table 1, then the Applicant must acquire the land in accordance with the procedures in conditions 6-7 of Schedule 4.  <table><tr><th colspan="2">Table 1: Land subject to acquisition upon request</th></tr><tr><th>Basis</th><th>Receiver</th></tr><tr><td>Noise</td><td>23, 45, 47, 67, 96, 102, 108, 112, 118, 120, 120c, 121, 136, 143a, 143b, 143c, 143d, 143e, 147, 153a, 153b, 156a, 157a, 158, 159, 447, 448, 449</td></tr><tr><td>Noise &amp; Air</td><td>43, 43b</td></tr><tr><td>Air</td><td>20<sup>2</sup>, 21<sup>1</sup></td></tr></table> Notes: 1 To identify the locations referred to in Table 1, see the figures in Appendix 5. 2 The Applicant is only required to acquire and/or install mitigation measures at this property if acquisition and/or mitigation is not reasonably achievable under a separate approval for the Bengalla mine.	Table 1: Land subject to acquisition upon request		Basis	Receiver	Noise	23, 45, 47, 67, 96, 102, 108, 112, 118, 120, 120c, 121, 136, 143a, 143b, 143c, 143d, 143e, 147, 153a, 153b, 156a, 157a, 158, 159, 447, 448, 449	Noise & Air	43, 43b	Air	20 <sup>2</sup> , 21 <sup>1</sup>	EMM general audit team	N/A	There have been no written requests for acquisition during the audit period.	Not triggered																																																																																															
Table 1: Land subject to acquisition upon request																																																																																																														
Basis	Receiver																																																																																																													
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ADDITIONAL MITIGATION UPON REQUEST																																																																																																														
2	Upon receiving a written request from the owner of any residence on any land listed in Table 1 (unless the owner of that land has requested acquisition) or Table 2, the Applicant must implement additional: (a) noise mitigation measures (such as double-glazing, insulation and/or air conditioning); and/or (b) air quality mitigation measures (such as air filters, a first flush roof water drainage system and/or air conditioning), as relevant, at the residence(s) in consultation with the owner. These measures must be reasonable and feasible, and directed towards reducing the noise and/or air quality impacts of the development on the residence(s). The Applicant must also be responsible for the reasonable costs of ongoing maintenance of these additional mitigation measures until the cessation of mining operations. If within 3 months of receiving this request from the owner, the Applicant and the owner cannot agree on the measures to be implemented, or there is a dispute about the implementation of these measures, then either party may refer the matter to the Secretary for resolution.  <table><tr><th colspan="2">Table 2: Land where additional mitigation measures are available on request</th></tr><tr><th>Basis</th><th>Receiver</th></tr><tr><td>Noise</td><td>19, 20, 21, 68, 74, 77, 79, 80a, 84a, 86a, 139, 140a, 140c, 154, 203, 207, 257, 258, 259, 526</td></tr></table> Note: 1 To identify the locations referred to in Table 2, see the figures in Appendix 5.	Table 2: Land where additional mitigation measures are available on request		Basis	Receiver	Noise	19, 20, 21, 68, 74, 77, 79, 80a, 84a, 86a, 139, 140a, 140c, 154, 203, 207, 257, 258, 259, 526	EMM general audit team	Five requests for acquisition during the audit period.	There have been five requests for acquisition during the audit period. MPO have completed 4/5 requests. The final request is still in negotiations with the land holder. The land holder has requested the acquisition request be put on hold for the time being.	Compliant																																																																																																			
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Noise Criteria																																																																																																														
3	Except for the noise-affected land referred to in Table 1, the Applicant must ensure that the operational noise generated by the development does not exceed the criteria in Table 3 at any residence on privately-owned land.  <table><tr><th colspan="5">Table 3: Noise criteria dB(A)</th></tr><tr><th rowspan="2">Receiver or other location</th><th>Day</th><th>Evening</th><th colspan="2">Night</th></tr><tr><th>L<sub>Aeq,15min</sub></th><th>L<sub>Aeq,15min</sub></th><th>L<sub>Aeq,15min</sub></th><th>L<sub>A1(1min)</sub></th></tr><tr><td>68, 74</td><td>43</td><td>42</td><td>42</td><td>45</td></tr><tr><td>86a</td><td>42</td><td>42</td><td>42</td><td>45</td></tr><tr><td>35, 35b, 77</td><td>42</td><td>41</td><td>41</td><td>45</td></tr><tr><td>79, 80a, 140c, 526</td><td>41</td><td>41</td><td>41</td><td>45</td></tr><tr><td>289</td><td>41</td><td>40</td><td>40</td><td>45</td></tr><tr><td>84a, 139, 154, 203, 257, 258a</td><td>40</td><td>40</td><td>40</td><td>45</td></tr><tr><td>83</td><td>40</td><td>39</td><td>39</td><td>45</td></tr><tr><td>86b, 140a, 202, 259</td><td>39</td><td>39</td><td>39</td><td>45</td></tr><tr><td>198, 202b</td><td>38</td><td>38</td><td>38</td><td>45</td></tr><tr><td>260, 261</td><td>37</td><td>37</td><td>37</td><td>45</td></tr><tr><td>169, 272</td><td>36</td><td>36</td><td>36</td><td>45</td></tr><tr><td>NAG 5 - All privately-owned land</td><td>41</td><td>40</td><td>39</td><td>45</td></tr><tr><td>NAG 6 - All privately-owned land</td><td>37</td><td>37</td><td>37</td><td>45</td></tr><tr><td>NAG 7 - All privately-owned land</td><td>40</td><td>37</td><td>37</td><td>45</td></tr><tr><td>NAG 8 - All privately-owned land</td><td>41</td><td>39</td><td>39</td><td>45</td></tr><tr><td>NAG 9 - All privately-owned land</td><td>39</td><td>38</td><td>37</td><td>45</td></tr><tr><td>NAG 11 - All privately-owned land</td><td>37</td><td>36</td><td>35</td><td>45</td></tr><tr><td>All other privately-owned land</td><td>35</td><td>35</td><td>35</td><td>45</td></tr></table> Notes: • To identify the locations referred to in Table 3, see the figures in Appendix 5. • Noise generated by the development is to be measured in accordance with the relevant procedures and exemptions (including certain meteorological conditions) of the NSW Industrial Noise Policy, with the exception of the application of modifying factors under Fact Sheet C of the Noise Policy for Industry. However, these criteria do not apply if the Applicant has a written agreement with the relevant landowner to exceed the criteria, and the Applicant has advised the Department in writing of the terms of this agreement.	Table 3: Noise criteria dB(A)					Receiver or other location	Day	Evening	Night		L <sub>Aeq,15min</sub>	L <sub>Aeq,15min</sub>	L <sub>Aeq,15min</sub>	L <sub>A1(1min)</sub>	68, 74	43	42	42	45	86a	42	42	42	45	35, 35b, 77	42	41	41	45	79, 80a, 140c, 526	41	41	41	45	289	41	40	40	45	84a, 139, 154, 203, 257, 258a	40	40	40	45	83	40	39	39	45	86b, 140a, 202, 259	39	39	39	45	198, 202b	38	38	38	45	260, 261	37	37	37	45	169, 272	36	36	36	45	NAG 5 - All privately-owned land	41	40	39	45	NAG 6 - All privately-owned land	37	37	37	45	NAG 7 - All privately-owned land	40	37	37	45	NAG 8 - All privately-owned land	41	39	39	45	NAG 9 - All privately-owned land	39	38	37	45	NAG 11 - All privately-owned land	37	36	35	45	All other privately-owned land	35	35	35	45	Bridges Acoustics	19/11/21 - DPE warning letter - Sustained exceedance (measurements at 00:18 and 00:54) of the LA1(1 minute) criterion at monitoring location N-AT4. Consultants monitoring reports Monthly monitoring reports Annual Reviews for 2020, 2021 and 2022.	Review of consultant's noise monitoring reports indicates: (non-compliances in bold, other comments not bold) - April 2020 - Exceedance of the LA1,1min criterion at N-AT4 - July 2020 - Exceedance of the LAeq,15min and LA1,1min criteria at N-AT3 - July 2021 - Exceedance of the LA1,1min criterion at N-AT3, although the follow-up measurement showed compliance - August 2021 - Exceedance of the LA1,1min criterion at N-AT4 - November 2022 - Exceedance of the LA1,1min criterion at N-AT4. Exceedance of the LA1,1min criterion at N-AT5, although the follow-up measurement showed compliance  Review of the monthly monitoring reports prepared by MACH Energy indicates: - December 2020 - Incorrect results were reported in Table 9-2 for the LAeq,15min levels at N-AT4 and N-AT5 - July 2021 - The LA1,1min exceedance was not reported. The report only includes the follow-up measurement result - September 2021 - Incorrect results were reported in Tables 9-1 and 9-2 for the LAeq,15min and LA1,1min levels at N-AT4, N-AT5 and N-AT6 - January 2022 - Incorrect results are reported in Table 9-2 for all LAeq,15min levels  A review of the 2020 Annual Review indicates: Results are correctly reported. Exceedances of the LA1,1min criterion at N-AT3 in July 2020 are acknowledged, however the Annual Review states noise levels would have been acceptable at more remote sensitive receptors. N-AT3 was later relocated closer to residences, which is appropriate  A review of the 2021 Annual Review indicates: Section 5.2.2 does not mention the exceedance of LA1,1min criterion in July consistent with the monthly monitoring report, although this event is correctly recorded in Appendix A Section 5.2.3 states the August 2021 LA1,1min exceedance did not impact any residence, although this statement is not justified as N-AT4 is close to residences  A review of the 2022 Annual Review indicates: Section 5.2.2 correctly reports results for the period Section 5.2.3 states the November 2022 LA1,1min exceedances did not impact any residence, although this statement is not justified as N-AT4 is close to residences  <b>Other issues or recommendations (REC1):</b> 1. All noise monitoring reports during the audit period indicate at least one Class 2 acoustic calibrator was used for a field-check of a Class 1 sound level meter, contrary to relevant standards and policies including IEC 61672-1 and Approved Methods for the	Non-compliant	NC1
Table 3: Noise criteria dB(A)																																																																																																														
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				Use a Class 1 sound level meter, conformity to relevant standards and policies including NCC 2012/23 and approved methods for the Measurement and Analysis of Environmental Noise in NSW (EPA, 2022). A Class 1 calibrator must be used with a Class 1 sound level meter. 2. One sound level meter calibration certificate in the January 2021 consultant's report was invalid, as it was dated after the noise survey. 3. The April 2022 consultant's report did not include calibration certificates for any instruments.																						
4	Deleted.																									
Cumulative Noise Criteria																										
5	Except for the noise-affected land referred to in Table 1, the Applicant must implement all reasonable and feasible measures to ensure that the operational noise generated by the development combined with the noise generated by other mines in the area does not exceed the criteria in Table 5 at any residence on privately-owned land.  <div>Table 5: Cumulative noise criteria dB(A) L<sub>90</sub> (period)</div> <table><tr><th>Location</th><th>Day</th><th>Evening</th><th>Night</th></tr><tr><td>NAG 8, 9</td><td>55</td><td>45</td><td>40</td></tr><tr><td>All other privately-owned land</td><td>50</td><td>45</td><td>40</td></tr></table> <div>Notes:</div> <ul style="list-style-type: none"><li>To identify the locations referred to in Table 5, see the figures in Appendix 5; and</li><li>Cumulative noise is to be measured in accordance with the relevant procedures and exemptions (including certain meteorological conditions) of the NSW Industrial Noise Policy.</li></ul>	Location	Day	Evening	Night	NAG 8, 9	55	45	40	All other privately-owned land	50	45	40	Bridges Acoustics	Annual Reviews for 2020, 2021 and 2022. Consultants monitoring reports. Monthly monitoring reports.	A review of consultant's report, monthly monitoring reports and Annual Reviews indicates no exceedances of the cumulative noise criteria occurred during the audit period.	Compliant									
Location	Day	Evening	Night																							
NAG 8, 9	55	45	40																							
All other privately-owned land	50	45	40																							
6	Deleted.																									
Rail Noise																										
7	The Applicant must only use locomotives and rolling stock that are approved to operate on the NSW rail network in accordance with the noise limits in Sydney Trains' EPL (No. 12208) and ARTC's EPL (No. 3142).	Bridges Acoustics	Noise Management Plan. Sydney Trains and ARTC rail agreements.	Section 6.1.5 of the Noise Management Plan acknowledges this condition.  MACH Energy personnel advised rail contracts with Aurizon include a requirement that all trains must comply with the Sydney Trains EPL 12208 and ARTC EPL 3142.	Compliant																					
Noise Operating Conditions																										
8	The Applicant must: (a) implement best practice noise management, including all reasonable and feasible noise mitigation measures to minimise the construction, operational, low frequency, and rail noise generated by the development; (b) minimise the noise impacts of the development during temperature inversions; (c) regularly assess the real-time noise monitoring and meteorological forecasting data and relocate, modify, and/or stop operations on site to ensure compliance with the relevant conditions of this consent; and (d) co-ordinate the noise management on site with the noise management at nearby mines (including the Bengalla mine) to minimise the cumulative noise impacts of the mines, to the satisfaction of the Secretary. <i>Note: Monitoring under this consent is not required at all residences and the use of representative monitoring locations can be used to demonstrate compliance with criteria, if agreed to by the Secretary.</i>	Bridges Acoustics	Noise Management Plan. Noise monitoring reports. Monitoring data.	(a) Section 8 of the Noise Management Plan describes a range of proactive and reactive noise management measures that are consistent with current best-practise. Section 9 of the Noise Management Plan describes compliance attended and real time unattended noise monitoring procedures to either confirm compliance with relevant limits or to identify any exceedances. (b) Monthly noise monitoring results indicate general compliance with the noise limits, with only intermittent rather than sustained exceedances of the limits at specific monitoring locations, including during periods of significant temperature inversion or other adverse weather conditions. (c) Monthly noise monitoring reports in which exceedances are measured note MACH Energy modified operations when an exceedance of the criteria was identified. Follow-up measurements typically show a reduction of measured noise levels after management measures were implemented. (d) Exceedances of the cumulative noise limits were not measured during the audit period, therefore detailed coordination with other industrial developments was not required.	Compliant																					
Noise Management Plan																										
9	The Applicant must prepare a Noise Management Plan for the development to the satisfaction of the Secretary. This plan must: (a) be submitted to the Secretary for approval by 30 June 2019, unless otherwise agreed by the Secretary; (b) describe the measures (including both proactive and reactive mitigation measures) to be implemented to: <ul style="list-style-type: none"><li>ensure compliance with the noise criteria and operating conditions in this consent;</li><li>minimise rail noise (including wheel and brake squeal) to the greatest extent practicable; and</li><li>minimise the noise impacts of the development during noise-enhancing meteorological conditions when the operational noise criteria in this consent do not apply (see Notes to condition 3 of Schedule 3);</li></ul> (c) include a noise monitoring program that: <ul style="list-style-type: none"><li>uses a combination of real-time and supplementary attended monitoring to evaluate the performance of the development;</li><li>accounts for the occurrence of any noise enhancement between the site, and any sensitive receivers located beyond the site boundary; and</li><li>includes a protocol for determining exceedances of the relevant conditions of this consent.</li></ul> (d) include a protocol that has been prepared in consultation with the owners of the nearby mines (including the Bengalla mine) to minimise the cumulative noise impacts of the mines. The Applicant must implement the management plan as approved by the Secretary.	Bridges Acoustics	Noise Management Plan.	(a) Noise Management Plan was last revised in December 2021 and approved by the Secretary's nominee in December 2021. (b) Section 8 of the Noise Management Plan describes a range of proactive and reactive noise management measures that are consistent with current best-practise. (c) Section 9 of the Noise Management Plan describes compliance attended and real time unattended noise monitoring procedures to either confirm compliance with relevant limits or to identify any exceedances. (d) Section 8.6 of the Noise Management Plan describes management measures to avoid exceedances of the cumulative noise limits. Exceedances of the cumulative noise limits were not measured during the audit period.	Compliant																					
BLASTING																										
Blasting Criteria																										
10	The Applicant must ensure that the blasting on the site does not cause exceedances of the criteria in Table 7.  <div>Table 7: Blasting criteria</div> <table><tr><th>Location</th><th>Airblast overpressure (dB(Lin Peak))</th><th>Ground vibration (mm/s)</th><th>Allowable exceedance</th></tr><tr><td>Residence on privately owned land</td><td>120</td><td>10</td><td>0%</td></tr><tr><td>Historic heritage sites</td><td>115</td><td>5</td><td>5% of the total number of blasts over a period of 12 months</td></tr><tr><td>All public infrastructure</td><td>-</td><td>10</td><td>0%</td></tr><tr><td></td><td>-</td><td>50</td><td>0%</td></tr></table> However, these criteria do not apply if the Applicant has a written agreement with the relevant owner or infrastructure provider/owner, and the Applicant has advised the Department in writing of the terms of this agreement.	Location	Airblast overpressure (dB(Lin Peak))	Ground vibration (mm/s)	Allowable exceedance	Residence on privately owned land	120	10	0%	Historic heritage sites	115	5	5% of the total number of blasts over a period of 12 months	All public infrastructure	-	10	0%		-	50	0%	Bridges Acoustics	Annual Reviews for 2020, 2021 and 2022. Blast monitoring data obtained from the blast monitoring service provider's monthly data. Monthly monitoring reports.	Detailed blast monitoring data were reviewed. The data indicate: - no exceedance of the vibration limits. - one exceedance of the overpressure limit, 122.7 dBL at BVOA on 2 September 2022, although this location is not close to residences. Monitor at residences (BVOC) indicated no exceedance at residences for this event. - exceedances of 5 mm/s and 115 dB occurred less than 5% of blasts at residential locations.	Compliant	
Location	Airblast overpressure (dB(Lin Peak))	Ground vibration (mm/s)	Allowable exceedance																							
Residence on privately owned land	120	10	0%																							
Historic heritage sites	115	5	5% of the total number of blasts over a period of 12 months																							
All public infrastructure	-	10	0%																							
	-	50	0%																							
Blasting Hours																										
11	The Applicant must only carry out blasting on site between 9am 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 Secretary.	Bridges Acoustics	Annual Reviews for 2020, 2021 and 2022. Blast monitoring data obtained from the blast monitoring service provider's monthly data. Monthly monitoring reports.	Detailed review of raw blast data indicate: - 4 June 2020 - Reported blast event at 2:48 am - 8 June 2020 - Reported blast event at 5:10 am The above events are false triggers as they did not coincide with blast events at MPO, therefore were not included in the monthly monitoring report or Annual Review. Investigation by site personnel into the data anomalies for 4 and 8 June 2020 confirmed no blast occurred at these times.	Compliant																					
Blasting Frequency																										
12	Unless otherwise agreed by the Secretary, the Applicant may carry out a maximum of: (a) 1 blast a day; and (b) 5 blasts a week, averaged over any calendar year; for the development. This condition does not apply to blasts that generate ground vibration of 0.5 mm/s or less at any residence on privately-owned land, or to blasts required to ensure the safety of the mine or its workers. <i>Note: For the purposes of this condition, a blast refers to a single blast event, which may involve a number of individual blasts fired in quick succession in a discrete area of the mine.</i>	Bridges Acoustics	Annual Reviews for 2020, 2021 and 2022. Blast monitoring data obtained from the blast monitoring service provider's monthly data. Monthly monitoring reports.	Detailed review of raw blast data indicate a number of instances of two blast events in a day, however in all cases: - one of the recorded blast events occurred at the neighbouring Bengalla Mine, or - the two blasts occurred within a minute of each other and represented a 'syncro-shot' at MPO, considered a single blast event.	Compliant																					
Property Inspections																										





20	<p>Except for the air quality-affected land referred to 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 exceed the criteria listed in Tables 8, 9 or 10 at any residence on privately-owned land.</p> <div><p>Table 8: Long term criteria for particulate matter</p><table><tr><th>Pollutant</th><th>Averaging Period</th><th><sup>d</sup>Criterion</th></tr><tr><td>Total suspended particulate (TSP) matter</td><td>Annual</td><td><sup>a</sup>90 µg/m³</td></tr><tr><td>Particulate matter &lt; 10 µm (PM<sub>10</sub>)</td><td>Annual</td><td><sup>a</sup>25 µg/m³</td></tr><tr><td>Particulate matter &lt; 2.5 µm (PM<sub>2.5</sub>)</td><td>Annual</td><td><sup>a</sup>8 µg/m³</td></tr></table><p>Table 9: Short term criteria for particulate matter</p><table><tr><th>Pollutant</th><th>Averaging Period</th><th><sup>d</sup>Criterion</th></tr><tr><td>Particulate matter &lt; 10 µm (PM<sub>10</sub>)</td><td>24 hour</td><td><sup>b</sup>50 µg/m³</td></tr><tr><td>Particulate matter &lt; 2.5 µm (PM<sub>2.5</sub>)</td><td>24 hour</td><td><sup>b</sup>25 µg/m³</td></tr></table><p>Table 10: Long term criteria for deposited dust</p><table><tr><th>Pollutant</th><th>Averaging Period</th><th>Maximum increase in deposited dust level</th><th>Maximum total deposited dust level</th></tr><tr><td><sup>c</sup> Deposited dust</td><td>Annual</td><td><sup>b</sup>2 g/m²/month</td><td><sup>a</sup>4 g/m²/month</td></tr></table><p>Notes to Tables 8-10: <i>a</i> Total impact (i.e. incremental increase in concentrations due to the development plus background concentrations due to all other sources); <i>b</i> Incremental impact (i.e. incremental increase in concentrations due to the development on its own); <i>c</i> Deposited dust is to be assessed as insoluble solids as defined by Standards Australia, AS/NZS 3580.10.1:2003: Methods for Sampling and Analysis of Ambient Air - Determination of Particulate Matter - Deposited Matter - Gravimetric Method; and <i>d</i> Excludes extraordinary events such as bushfires, prescribed burning, dust storms, sea fog, fire incidents or any other activity agreed by the Secretary.</p></div>	Pollutant	Averaging Period	<sup>d</sup> Criterion	Total suspended particulate (TSP) matter	Annual	<sup>a</sup> 90 µg/m³	Particulate matter < 10 µm (PM <sub>10</sub> )	Annual	<sup>a</sup> 25 µg/m³	Particulate matter < 2.5 µm (PM <sub>2.5</sub> )	Annual	<sup>a</sup> 8 µg/m³	Pollutant	Averaging Period	<sup>d</sup> Criterion	Particulate matter < 10 µm (PM <sub>10</sub> )	24 hour	<sup>b</sup> 50 µg/m³	Particulate matter < 2.5 µm (PM <sub>2.5</sub> )	24 hour	<sup>b</sup> 25 µg/m³	Pollutant	Averaging Period	Maximum increase in deposited dust level	Maximum total deposited dust level	<sup>c</sup> Deposited dust	Annual	<sup>b</sup> 2 g/m²/month	<sup>a</sup> 4 g/m²/month	EMM Air quality team	Annual Reviews for 2020, 2021 and 2022.	Dust gauge D7 exceeded the annual average criteria in 2020, 2021, and 2022 and D8 exceeded in 2020.	Annual reports state that D7 is located within the MPO boundary and between the MPO and a neighbouring mining operation and is therefore not used to assess compliance or to represent residential receivers in the area. According to the 2020 Annual Review report, D8 is representative of the nearest residences which are subject to acquisition and therefore under the Development Consent, do not need to comply with the criteria.	There were no exceedances of PM <sub>10</sub> , PM <sub>2.5</sub> or TSP in the reporting period.	Compliant	
Pollutant	Averaging Period	<sup>d</sup> Criterion																																			
Total suspended particulate (TSP) matter	Annual	<sup>a</sup> 90 µg/m³																																			
Particulate matter < 10 µm (PM <sub>10</sub> )	Annual	<sup>a</sup> 25 µg/m³																																			
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<sup>c</sup> Deposited dust	Annual	<sup>b</sup> 2 g/m²/month	<sup>a</sup> 4 g/m²/month																																		
21	Deleted.																																				
Air Quality Operating Conditions																																					
22	The Applicant must: (a) implement best practice air quality management, including all reasonable and feasible measures to minimise the odour, fume and dust emissions of the development; (b) minimise visible air pollution generated by the development; (c) minimise, where reasonable and feasible, the extent of potential dust generating surfaces exposed on the site at any given point in time; (d) minimise the air quality impacts of the development during adverse meteorological conditions and extraordinary events (see Note d above under Tables 8-10); (e) regularly assess the real-time air quality monitoring and meteorological forecasting data and relocate, modify and/or stop operations on site to ensure compliance with the relevant conditions of this consent; and (f) co-ordinate the air quality management on site with the air quality management at nearby mines (including the Bengalla mine) to minimise cumulative air quality impacts from the mines, to the satisfaction of the Secretary.	EMM Air quality team	AQGHGMP. Annual Reviews for 2020, 2021 and 2022. Site inspection.	Mitigation measures detailed in the AQGHGMP and Annual Review reports.	Monitoring data analysed in Annual Review reports.	Following sighted during site tour: - water carts and active management of dust. - online 'CatTool' allowing real-time response to air quality alarms. - Jacobs forecast of met conditions.	Compliant																														
Air Quality and Greenhouse Gas Management Plan																																					
23	The Applicant must prepare an Air Quality and Greenhouse Gas Management Plan for the development to the satisfaction of the Secretary. This plan must: (a) be submitted to the Secretary for approval prior to carrying out any development on site; (b) describe the measures that would be implemented to ensure compliance with the relevant conditions of this consent, including a real-time air quality management system that employs reactive and proactive mitigation measures; (c) include an air quality monitoring program that: • uses a combination of real-time monitors and supplementary monitors to evaluate the performance of the development; • includes PM2.5 monitoring (although this obligation could be satisfied by the regional air quality monitoring network if sufficient justification is provided); • includes a protocol for determining exceedances of the relevant conditions of this consent; and (d) include a protocol that has been prepared in consultation with the owners of nearby mines to minimise the cumulative air quality impacts of the mines. The Applicant must implement the management plan as approved by the Secretary.	EMM Air quality team	AQGHGMP. Annual Reviews for 2020, 2021 and 2022. Site inspection.	AQGHGMP prepared with relevant sections including AQ monitoring program, protocol for determining exceedances, and cumulative air quality management protocol.	Annual Reviews include AQ monitoring results (incl. PM <sub>2.5</sub> ).		Compliant																														
METEOROLOGICAL MONITORING																																					
24	For the life of the development, the Applicant must ensure that there is a meteorological station operating in the vicinity of the site that: (a) complies with the requirements in the Approved Methods for Sampling of Air Pollutants in NSW guideline; and (b) is capable of continuous real-time measurement of temperature lapse rate in accordance with the NSW Industrial Noise Policy , or as otherwise approved by the Secretary.	EMM Air quality team	AQGHGMP. Met data provided for audit period. Site inspection.	Site inspection confirmed met station working.	Temperature lapse rate data has been provided.		Compliant																														
SOIL & WATER																																					
	Note: Under the Water Act 1912 and/or the Water Management Act 2000, the Applicant is required to obtain water licences for the development.																																				
Water Supply																																					
25	The Applicant must ensure that it has sufficient water for all stages of development, and if necessary, adjust the scale of mining operations on site, to match its available water supply to the satisfaction of the Secretary.	EMM general audit team	Annual Reviews for 2020, 2021 and 2022. Site water balance. Water take data.	Water take data from the Annual Reviews confirmed no exceedances of water entitlements.			Compliant																														
Water Discharges																																					
26	The Applicant must ensure that any surface water discharges from the site comply with the: (a) discharge limits (both volume and quality) set for the development in any EPL; or (b) relevant provisions of the POEO Act or Protection of the Environment Operations (Hunter River Salinity Trading Scheme) Regulation 2002.	EMM general audit team	Annual Reviews for 2020, 2021 and 2022. Letters to/from agencies reporting the events. Water management plan. Site inspection/interviews.	Seven water discharge events occurred during the audit period following periods of heavy rain (1:5 year and 1:10 year rainfall events). These occurred on: * 8 March 2021 - failure of erosion and sediment controls resulted in run off leaving site. * 8 June 2021 - two separate discharges of sediment-laden water from MOD 4 construction area and into Wybong Road swale drains, where it ceased. * 12 November 2021 - discharge of sediment-laden water from the Rail 2 Project Area and into Wybong Road swale drains. * 8 December 2021 - discharge from four sediment basins (SD4, SD6, SD7 and ED2) offsite. * 9 December 2021 - discharge from four sediment basins (SD4, SD6, SD7 and ED2) offsite. * 8 March 2022 - discharge from five sediment basins (SD1, SD4, SD6, SD7 and TSB2) offsite. * 21 October 2022 - spillway discharge was observed from SD4. MPO confirmed during the site interviews that the sediment dams are designed, constructed and managed in accordance with Managing Urban Stormwater: Soils and Construction – Volume 2E, Mines and Quarries “the Blue Book” (Landcom, 2004). The water releases exceeded capacities for which the sediment dams were designed and managed. Following the rainfall events, MPO completed investigations into the cause and reported the incidents to DPE and EPA. As required by the water management plan, water quality sampling was undertaken during the events, with water quality showing negligible changes in release water in pH, EC and TSS. Regular inspections were implemented and undertaken prior to and during forecasted heavy rainfall events, in addition to regular third party inspections by a CPESC. MPO reviewed and updated the water management plan in accordance with Schedule 5, Condition 4.	Non-compliant	NC3																															
Compensatory Water Supply																																					





	<i>Note: Under the National Parks and Wildlife Act 1974 or the Heritage Act 1977, the Applicant is required to obtain approvals for any impacts to Aboriginal objects and/or significant relics.</i>					
<b>Aboriginal Heritage Conservation Strategy</b>						
33	<p>The Applicant must prepare an Aboriginal Heritage Conservation Strategy for the development to the satisfaction of the Secretary. This strategy must:</p> <p>(a) be prepared by suitably qualified and experienced persons whose appointment has been endorsed by the Secretary;</p> <p>(b) be prepared in consultation with Heritage NSW and the Registered Aboriginal Parties;</p> <p>(c) be submitted to the Secretary for approval prior to carrying out any development on site;</p> <p>(d) provide for the establishment and conservation of an off-site Aboriginal cultural heritage conservation area/s that has comparable Aboriginal cultural heritage values (both cultural and archaeological) to the areas that would be developed on site;</p> <p>(e) describe the measures that would be implemented to provide appropriate long term security for the proposed Aboriginal cultural heritage conservation areas; and</p> <p>(f) include an action plan for the implementation of the strategy.</p> <p>The detailed measures for the implementation of the strategy are to be outlined in the Heritage Management Plan (see condition 36).</p> <p>The Applicant must implement the approved strategy as approved from time to time by the Secretary.</p> <p><i>Note: The Aboriginal cultural heritage conservation area/s may be combined with any similar offset/conservation area required for the development under Commonwealth legislation, subject to suitably offsetting the cultural heritage impacts of the development.</i></p>	EMM general audit team	Aboriginal Heritage Management Plan (AHMP). Approval of the AHMP by DPE on 31/10/19. Peter Kuskie endorsed on 5/07/17.	<p>The Aboriginal Heritage Conservation Strategy is included as Section 5 of the AHMP.</p> <p>The AHMP was approved by DPE on 31/10/19.</p> <p>As reported in the 2022 Annual Review, suitable arrangements to provide appropriate long-term security for the Aboriginal Heritage Conservation Area (Areas B and C) are ongoing and include liaison with Heritage NSW and the RAPs for an alternative artefact keeping place and proposing Aboriginal Cultural Heritage survey of select biodiversity offset areas to potentially identify alternatives.</p>	Compliant	
34	Within 2 years of the approval of the Aboriginal Heritage Conservation Strategy, the Applicant must demonstrate to the satisfaction of the Secretary, that it has made suitable arrangements to provide appropriate long term security for the Aboriginal cultural heritage conservation area/s in the Aboriginal Heritage Conservation Strategy.	EMM general audit team	Aboriginal Heritage Management Plan. Approval of the AHMP by DPE on 31/10/19.	<p>The Aboriginal Heritage Conservation Strategy is included as Section 5 of the AHMP.</p> <p>The AHMP was approved by DPE on 31/10/19.</p>	Compliant	
<b>Oral History</b>						
35	<p>By the end of December 2013, the Applicant must prepare a detailed history of the Mount Pleasant locality to the satisfaction of the Secretary. This history must:</p> <p>(a) be prepared by suitably qualified and experienced persons whose appointment has been endorsed by the Secretary;</p> <p>(b) be prepared in consultation with the Heritage NSW, the local history society, local community (including former residents as far as is practicable), and Registered Aboriginal Parties;</p> <p>(c) be prepared in accordance with the relevant Heritage Council of NSW guidelines; and</p> <p>(d) include detailed historical research as well as an oral history.</p>	EMM general audit team	Aboriginal Heritage Management Plan	<p>This condition is prior to the audit period. The AHMP states:</p> <p>The Oral History Report was prepared in 2004 (and subsequently reviewed in 2014). On 20 January 2014 then NSW Department of Planning and Infrastructure approved the report and advised that Condition 35, Schedule 3 of Development Consent DA 92/97 had been satisfied.</p>	Compliant	
<b>Aboriginal Heritage Management Plan</b>						
36	<p>The Applicant must prepare a Aboriginal Heritage Management Plan for the development to the satisfaction of the Secretary. This plan must:</p> <p>(a) be prepared in consultation with Heritage NSW and the Registered Aboriginal Parties by suitably qualified and experienced persons whose appointment has been endorsed by the Secretary;</p> <p>(b) be submitted to the Secretary for approval by 30 June 2019, unless otherwise agreed by the Secretary;</p> <p>(c) include:</p> <ul style="list-style-type: none"> <li>a detailed plan for the implementation of the approved Aboriginal Heritage Conservation Strategy (required under condition 34);</li> <li>a description of the measures that would be implemented to: <ul style="list-style-type: none"> <li>comply with the requirements of any Aboriginal Heritage Impact Permit issued for the development, including any approved archaeological testing and salvage program;</li> <li>store the Aboriginal objects salvaged, both during construction and in the long term;</li> <li>protect, monitor and/or manage all Aboriginal objects on site until the impacts of the development on these objects is unavoidable;</li> <li>minimise the blasting impacts of the development on Aboriginal objects in the vicinity of the site;</li> <li>manage the discovery of any human remains or previously unidentified Aboriginal objects on site;</li> <li>enable Registered Aboriginal Parties to get reasonable access to the site during the development;</li> <li>ensure Registered Aboriginal Parties are consulted about the conservation and management of Aboriginal cultural heritage on site; and</li> <li>ensure construction personnel receive suitable heritage inductions prior to carrying out any development on site, and that suitable records are kept of these inductions.</li> </ul> </li> </ul> <p>The Applicant must implement the management plan as approved by the Secretary.</p> <p><i>Notes:</i></p> <ul style="list-style-type: none"> <li>The Aboriginal Heritage Management Plan must be consistent with the requirements of any Aboriginal Heritage Impact Permit(s) issued by Heritage NSW relevant to the development.</li> <li>The Applicant must ensure that Aboriginal site recording forms for newly recorded sites and Aboriginal site impact recording forms for salvaged sites are submitted to Heritage NSW for inclusion on the Aboriginal Heritage Information Management System database.</li> </ul>	EMM general audit team	<p>a) AHMP.</p> <p>b) RAP consultation.</p> <p>c) AHMP Section 2-6.</p> <p>Induction records.</p> <p>Evidence of Heritage artefact keeping place at Broomfield Homestead.</p>	<p>a) The most recently approved version of the ACHMP was approved on 31 October 2019. This document has been reviewed as part of the Audit. Evidence of consultation provided in Section 1.3 of the MP. Includes consultation for MOD 4. Appendix H provides key correspondence.</p> <p>b) Site has provided evidence of consultation with the RAP's.</p> <p>c) The key aspects of the dot points in this condition have been covered in Section 2-6 of the ACHMP. The document is set out with cross referencing tables outlining where sub conditions have been covered.</p> <p>Evidence of inductions relating to heritage items</p> <p>Evidence of Heritage artefact keeping place at Broomfield Homestead. This is temporary keeping place. MACH Energy has been discussing with RAP's regarding a long term keeping place.</p> <p>Heritage items covered as part of this process. Evidence of ground disturbance permits. The salvaging generally occurs well before disturbance due to the time it takes for salvage. All those involved in disturbance have to sign onto the permit.</p> <p>Flagging and signage around areas of known heritage items.</p> <p>ACHMP appears to meet the requirements of HeritageNSW.</p>	Compliant	
<b>TRANSPORT</b>						
<b>Removal of Rail Loop and Infrastructure Corridor</b>						
37	<p>The Applicant must, by no later than 31 October 2022:</p> <p>(a) remove all infrastructure associated with the development within Mining Lease No. 1645 (ML 1645) south of Wybong Road (other than infrastructure which the operator of the Bengalla mine agrees with the Applicant, in writing, can remain in situ);</p> <p>(b) do all things available to transfer or cause the grant of a mining lease over that part of ML 1645 south of Wybong Road to the operator of Bengalla mine or its nominee;</p> <p>(c) transfer the freehold land owned by the Applicant within ML 1645 south of Wybong Road to the operator of Bengalla mine (or its nominee) at rural market value;</p> <p>(d) release any easements for pipeline and rail spur within or in the vicinity of ML 1645 south of Wybong Road which benefit land owned by the Applicant; and</p> <p>(e) demolish the Bengalla Link Road bridge required under condition 38 (a) below and, unless otherwise agreed by the Secretary, reinstate the road reserve to the satisfaction of Council.</p> <p><i>Note: The rail loop and infrastructure corridor is shown in Figure 3 of Appendix 2.</i></p>	EMM general audit team	<p>a) Sighted letter dated 28 October from MACH to DPE confirming removal of all infrastructure within ML 1645. With the exception of the bridge in agreement Bengalla.</p> <p>b) Sighted letter dated 28 October from MACH to DPE confirming part transfer of ML 1645 to Bengalla on 23 December 2020.</p> <p>c) Sighted letter dated 28 October from MACH to DPE confirming land transfer completed 6 December 2019.</p> <p>d) Sighted letter dated 28 October from MACH to DPE confirming release of required easements to Bengalla/</p> <p>e) Sighted letter dated 28 October from MACH to DPE confirming in consultation with DPE and Bengalla the demolition of the bridge would not be required till the realignment of Bengalla Link road is completed by Bengalla.</p>	<p>Sighted all rail corridor all infrastructure removed during site inspection. Noting bridge remains in consult with Bengalla, MSC and DPE.</p> <p>Sighted evidence of correspondence satisfying condition.</p>	Compliant	
<b>Road Works</b>						
	<i>Note: Under the Roads Act 1993, the Applicant is required to obtain the consent of the appropriate roads authority prior to carrying out work on or over a public road.</i>	EMM general audit team	Noted.	Noted.		
38	<p>The Applicant must, at its own expense:</p> <p>(a) construct a bridge to carry the Bengalla Link Road over the proposed Mount Pleasant rail loop, in consultation with the operators of the Bengalla Mine;</p> <p>(b) construct the Mount Pleasant Northern Link Road to Dorset Road, prior to the closure of Castlerock Road;</p> <p>(c) construct the Mount Pleasant Western Link Road (generally in accordance with Council's Western Roads Strategy) from the intersection of the Bengalla Link Road to the intersection of the Mount Pleasant Northern Link Road, prior to the closure of Wybong Road;</p> <p>(d) construct the Mount Pleasant Mine Access Road;</p> <p>(e) upgrade the Wybong Road from the Bengalla Link Road to the Mount Pleasant Mine Access Road; and</p> <p>(f) construct an overpass or underpass across Wybong Road, or other means of crossing Wybong Road, should a construction road be proposed, to the satisfaction of Council.</p>	EMM general audit team	<p>Based on site communications all roads are Council Roads.</p> <p>Schedule confirmed during site audit.</p> <p>a) Completed Jan 2018;</p> <p>b) Works proposed early 2024;</p> <p>c)The current mine plan does not require the closure of Wybong Road. MPO will update Council if this requirement changes;</p> <p>d) Completed December 2016;</p> <p>e) Completed January 2018; and</p> <p>f) Wybong Road crossing completed May 2018</p>	Sighted completion of works during site and confirmed with site representatives remaining road closure timing.	Compliant	
39	<p>Should the following intersections be required, the Applicant must undertake construction works at:</p> <p>(a) the intersection of the Western Link Road and access to the mine site;</p> <p>(b) the intersection of the Bengalla Link Road and the Western Link Road;</p> <p>(c) the intersection of the Castlerock/Mount Pleasant Northern Link Road and the Western Link Road; and</p> <p>(d) the intersection of the Mount Pleasant Northern Link Road and Kayuga Road, to the satisfaction of Council and/or TfNSW.</p> <p>If there is any dispute between the Applicant and Council or TfNSW in relation to the funding or upgrade works, then any of the parties may refer the matter to the Secretary for resolution.</p>	EMM general audit team	<p>a) MPO site access intersection completed with the Wybong Road upgrade works.</p> <p>As per Condition 38 (c), Western Link Road should no longer be required. MPO will update Council if this requirement changes.</p> <p>b) Bengalla Link Road intersection works completed with the Wybong Road upgrade works.</p> <p>c) As per Condition 38 (b).</p> <p>d) As per Condition 38 (b).</p> <p>MACH Energy paid for all these road works. Based on site communications there have been no disputes. They were all Council roads.</p>	A Road Works Schedule document was sighted during the site visit and status confirmed by site representatives.	Compliant	

39A	The Applicant must, by no later than 31 October 2022: (a) construct a rail overpass to carry the MOD 4 rail infrastructure over Wybong Road; (b) construct a road bridge to carry Overton Road over the MOD 4 rail infrastructure; and (c) partially realign Overton Road, as shown conceptually in Figure 5 of EA (MOD 4), in accordance with the relevant requirements of Austroads Guide to Road Design and to the satisfaction of Council. The Secretary may waive or alter the above requirements if they are no longer required following the completion of the final design of the MOD 4 rail infrastructure.	EMM general audit team	a) Complete. b) Overton intersection with Wybong road located under MOD 4 rail bridge of Wybong Road. Done in consult with MSC and DPE. c) Road designed as per final design.	Confirmed completion of works and consultation with MSC.	Compliant	
40	The Applicant must: (a) prepare a detailed schedule outlining the timing of the road works required by conditions 38, 39 and 39A by the end of June 2018; and (b) update this schedule annually, to the satisfaction of Council.	EMM general audit team	N/A	Not within audit period - however confirmed as compliant via pervious 2020 IEA (SLR 2020). Confirmed via previous audit findings.	Compliant	
<b>Road Maintenance</b>						
41	During the development, the Applicant must maintain the roads and intersections between the Bengalla Mine main entrance and the Mt Pleasant Mine main entrance, including: (a) part of the Bengalla Link Road; (b) part of the Wybong Road; and (c) part of the Mount Pleasant Western Link Road. The Applicant must develop a Maintenance Management Plan in respect of these roads, to the satisfaction of Council.	EMM general audit team	Evidence of road maintenance plan dated September 2021 with this signed by MACH Energy and Council. The plan outlines assets and maintenance. Based on site inspection there were no issues. Note: Mount Pleasant Western link not yet constructed therefore not included within Plan.	Sighted road maintenance plan dated September 2021 with this signed by MACH Energy and Council.	Compliant	
<b>Thomas Mitchell Drive</b>						
41A	The Applicant must contribute to the upgrade and maintenance of Thomas Mitchell Drive, proportionate to its impact (based on usage) on that infrastructure, in accordance with the Contributions Study prepared by GHD titled, "Thomas Mitchell Drive Contributions Study, May 2015" as amended by the supplementary report dated, August 2018 (as amended from time to time), unless otherwise agreed with the Secretary. For Thomas Mitchell Drive, the contributions must be paid to Council in accordance with: (a) the payment schedule in the Contributions Study for the upgrade works; and (b) the maintenance schedule established in accordance with the Contributions Study during the life of the development, unless otherwise agreed with Council. <i>Notes:</i> • In making a determination about the applicable contribution/s under this condition, the Secretary will take into account the contributions already paid or required to be paid towards the upgrade and maintenance of the local road network in the Muswellbrook Local Government Area under this consent and any associated Planning Agreement with Council. • If there is a dispute between the relevant parties about the implementation of this condition, then any party may refer the matter to the Secretary for resolution.	EMM general audit team	a) Sighted Scenario 2 - contribution analysis from the Thomas Mitchell Drive contribution study, and Purchase Order raised for MSC for the required amount. b) Sighted evidence of contribution in accordance with contribution analysis	Sighted payment schedule and evidence of payments.	Compliant	
<b>Road Access and Signage</b>						
42	The Applicant must ensure that as far as possible the preferred mine access road route, as described in the EIS, is the only route used by employees and contractors travelling to the mine site from Muswellbrook.	EMM general audit team	Site inspection.	Mine access road sighted at audit. No reason to determine non-compliance. Staff and contractors are informed of the requirement to not use Wybong Road.	Compliant	
43	The Applicant must maintain signs and give at least 24 hours notice of temporary road closures. The location and wording of the signs are to be approved by Council. A protocol is to be established, in consultation with the emergency service providers and Council, to permit the passage of emergency vehicles during road closures.	EMM general audit team	Signage and notifications in accordance with BMP.	Blasting schedule not available online 3/3/23 as no blast were planned during audit site visit. Sample evidence provided by site. No blast notification on MSC website as no blast were planned. Sample evidence provided by site. Section 9 of Blast Management Plan confirms road closure protocol. Section 6.5 confirms consultation with MSC.	Compliant	
<b>Monitoring of Coal Transport</b>						
44	The Applicant must: (a) keep records of the: • amount of coal transported from the site (on a monthly basis); and • date and time of each train movement generated by the development; and (b) make these records available on its website at the end of each calendar year.	EMM general audit team	Signed coal transport records for the audit period, example available at the below link: <a href="https://machenergyaustralia.com.au/wp-content/uploads/Coal-Transport-Records-2022.pdf">https://machenergyaustralia.com.au/wp-content/uploads/Coal-Transport-Records-2022.pdf</a>	Signed coal transport records for the audit period.	Compliant	
<b>CONSTRUCTION OF RAIL AND WATER SUPPLY INFRASTRUCTURE</b>						
44A	The Applicant must carry out a detailed geotechnical investigation of former underground mine workings in the vicinity of the MOD 4 rail infrastructure. This investigation must: (a) be undertaken by suitably qualified and experienced persons; (b) be undertaken in consultation with SA NSW; (c) determine the extent of underground mine workings; (d) provide recommendations to ensure the geotechnical stability of MOD 4 rail infrastructure; and (e) be conducted and reported to the satisfaction of the Secretary. A final report detailing the outcomes of the geotechnical investigation must be submitted to the Secretary. The Applicant must not commence MOD 4 construction works in the vicinity of the former underground mine until the Geotechnical Investigation Report is approved by the Secretary.	EMM general audit team	Correspondence from DPE satisfying condition.	Sighted letter from DPE dated 22 Jun 2020 confirming Geotechnical Investigation Report provided 17 April 2020 satisfies condition.	Compliant	
44B	The Applicant must implement the recommendations of the Geotechnical Investigation Report to the satisfaction of the Secretary.	EMM general audit team	Geotechnical Investigation Report (AECOM 2021)	Site confirmed works were undertaken in accordance with Geotechnical Investigation Report (AECOM 2021)	Compliant	
44C	The Applicant must design and construct the MOD 4 rail infrastructure to meet the following performance criteria during a 1% Annual Exceedance Probability flood event: (a) no more than 0.1 m increase in flood levels on any privately-owned land; (b) no more than 0.01 m increase in flood levels at any privately-owned residence or commercial spaces; (c) no more than 0.01 m increase in flood levels at any public roads servicing privately-owned properties; and (d) no more than 0.1 m per second increase in flood velocities at privately-owned residences or commercial spaces.	EMM general audit team	Correspondence from DPE satisfying condition.	Sighted letter from DPE dated 8 Aug 2020 confirming documentation provided to DPE satisfies condition.	Compliant	
44D	The Applicant must commission an independent review of the final design of the MOD 4 rail infrastructure, including any associated hydraulic structures. This review must: (a) be undertaken by suitably qualified and experienced persons; (b) be undertaken in consultation with BCD; (c) demonstrate that the final design meets the performance criteria in condition 44C above; (d) be conducted and reported to the satisfaction of the Secretary. A final report detailing the outcomes of the independent review must be submitted to the Secretary. The Applicant must not commence MOD 4 construction works until the final report is approved by the Secretary.	EMM general audit team	Correspondence from DPE satisfying condition.	Sighted letter from DPE dated 8 Aug 2020 confirming documentation provided to DPE satisfies condition.	Compliant	
44E	The Applicant must ensure that any asbestos encountered during MOD 4 construction works is monitored, handled, transported and disposed of by appropriately qualified and licensed contractors in accordance with the requirements of SafeWork NSW and relevant guidelines, including: (a) Work Health and Safety Regulation 2017; (b) SafeWork NSW Code of Practice – How to Manage and Control Asbestos in the Workplace September 2016; (c) SafeWork NSW Code of Practice – How to Safely Remove Asbestos September 2016; (d) Protection of the Environment Operations (Waste) Regulation 2014; and (e) the EPA's Waste Classification Guidelines.	EMM general audit team	Site confirmed asbestos was encountered during MOD4 construction works. Sighted sample of associated EPA Consignment sheets.	Site confirmed asbestos was encountered during MOD 4 construction works. Asbestos managed in accordance with CEMP Section 5.7. Sighted sample of associated EPA Consignment sheets.	Compliant	
44F	All MOD 4 construction works outside of the Mining Lease Boundary must be carried out during Standard Construction Hours (7 am to 6 pm, Monday to Friday; and 8 am to 1 pm on Saturdays), unless the works are: (a) required by: • NSW Police; or • a public authority for the delivery of vehicles, plant or materials; or (b) required in an emergency to avoid the loss of life, damage to property or to prevent material harm to the environment; or (c) approved under an Out of Hours Work Protocol. <i>Note: The Mining Lease Boundary is shown in Figure 2 of Appendix 2.</i>	EMM general audit team	2021 Annual Review. CEMP for MOD 4.	2021 Annual Review notes non-compliance on 31/3/21. Non-compliance reported. All construction works associated with MOD 4 has now been completed. Section 5.1.3 of the CEMP address the noted requirements. Noted an Out of Hours Works Protocol (OHWP), approved by the DPE Secretary 15/3/21. Available: <a href="https://machenergyaustralia.com.au/wp-content/uploads/Mount-Pleasant-Operation-Out-of-Hours-Work-Protocol-Final-March-2021.pdf">https://machenergyaustralia.com.au/wp-content/uploads/Mount-Pleasant-Operation-Out-of-Hours-Work-Protocol-Final-March-2021.pdf</a>	Non-compliant	NC4

44G	<p>If the Applicant proposes to undertake MOD 4 construction works (outside of the Mining Lease Boundary) outside the hours specified in condition 44F above, then the Applicant must prepare an Out of Hours Work Protocol for these works, to the satisfaction of the Secretary. This protocol must:</p> <p>(a) be prepared in consultation with the EPA and any residents who may be affected by the noise generated by these works;</p> <p>(b) address the relevant requirements of the Interim Construction Noise Guideline (DECC, 2009); and</p> <p>(c) be approved by the Secretary before any out of hours construction works are carried out. The Applicant must implement the Out of Hours Work Protocol as approved by the Secretary.</p> <p><i>Note: For areas where construction noise is predicted to be at or below operational noise criteria at sensitive receptors, this is likely to provide sufficient justification for the need to operate outside of recommended standard hours as specified in the Interim Construction Noise Guideline (DECC, 2009).</i></p>	EMM general audit team	CEMP for MOD 4. Out of Hours Works Protocol (OHWP).	Out of Hours Work Protocol (OHWP), approved by the DPE Secretary 15/3/21. Available: <a href="https://machenergyaustralia.com.au/wp-content/uploads/Mount-Pleasant-Operation-Out-of-Hours-Work-Protocol-Final-March-2021.pdf">https://machenergyaustralia.com.au/wp-content/uploads/Mount-Pleasant-Operation-Out-of-Hours-Work-Protocol-Final-March-2021.pdf</a> a) Evidence of consultation with EPA and residencies provided in Appendix A and B of OHWP. b) Sections 2 and 3 of the OHWP address the noted requirements. c) Sighted - approved by the DPE Secretary 15/3/22	Compliant	
44H	<p>The Applicant must ensure that the combined operational noise of the development and noise generated by the MOD 4 construction works outside of the Mining Lease Boundary does not exceed the criteria in Table 10A at any residence on privately-owned land</p> <p><i>Notes:</i></p> <ul style="list-style-type: none"><li>• To identify the locations referred to in Table 10A, see the figures in Appendix 5.</li><li>• The Mining Lease Boundary is shown in Figure 2 of Appendix 2.</li><li>• Noise generated by the development is to be measured in accordance with the relevant procedures and exemptions (including certain meteorological conditions) of the NSW Industrial Noise Policy, with the exception of the application of modifying factors under Fact Sheet C of the Noise Policy for Industry.</li></ul> <p>However, these criteria do not apply if the Applicant has a written agreement with the relevant landowner to exceed the criteria, and the Applicant has advised the Department in writing of the terms of this agreement.</p>	Bridges Acoustics	Review of monthly monitoring reports and annual reviews Construction equipment noise testing reports Two construction noise monitoring reports, for 25-27 May 2021 and 10 August 2021	<p>Section 5.2.2 of the 2020 Annual Review states there were no exceedances of the construction noise criteria during the reporting period.</p> <p>Section 4.1 of the Construction Environmental Management Plan includes noise criteria for construction activities, for standard (daytime) construction hours.</p> <p>Section 6.2.1 of the Construction Environmental Management Plan states monitoring would occur according to the Noise Management Plan, which only requires noise monitoring at night.</p> <p>Review of construction equipment noise test reports indicates equipment produces acceptable sound power levels for heavy diesel powered machines.</p> <p>The construction noise survey report for 25-27 May 2021 indicated compliance with the construction noise criteria during the day. However, the day criteria were also incorrectly applied to the night period, with monitoring results indicating night noise levels reaching the range 40 to 50 LAeq at the monitoring locations representative of nearest receivers.</p> <p>The construction noise survey report for 10 August 2021 indicated compliance with the construction noise criteria during the day. No noise monitoring occurred during the night.</p> <p><b>Recommendation (REC 7):</b> Adopt appropriate noise criteria for any out-of-hours construction work. Appropriate criteria are generally identical to usual MPO noise criteria unless alternative criteria are agreed with EPA/DPE.</p>	Non-compliant	NCS
44I	<p>The Applicant must prepare a Construction Environmental Management Plan for MOD 4 construction works, to the satisfaction of the Secretary. This plan must:</p> <p>(a) be prepared in consultation with the EPA, Council and any relevant road or utilities authorities;</p> <p>(b) describe measures to be implemented to minimise construction-related noise, vibration, dust, biodiversity and visual impacts, including specific measures to minimise:</p> <ul style="list-style-type: none"><li>• surface disturbance; and</li><li>• the cumulative impacts of construction and operational noise;</li></ul> <p>(c) describe detailed procedures to be implemented to:</p> <ul style="list-style-type: none"><li>• notify affected landowners of upcoming construction activities;</li><li>• receive, record, handle and respond to construction-related complaints; and</li><li>• resolve any disputes that may arise during MOD 4 construction works;</li></ul> <p>(d) include a Construction Traffic Management Plan which:</p> <ul style="list-style-type: none"><li>• describes the measures to be implemented to minimise traffic safety issues and disruption to local road users, including managing light, heavy and over-dimensional vehicles during construction works; and</li><li>• includes procedures for notifying other road users (including local bus operators) of any construction works that may disrupt their usual use of the road; and</li></ul> <p>(e) include a Historic Heritage Management Plan which describes measures to implement the relevant historic heritage management commitments outlined in Appendix 3; and</p> <p>(f) include an Unexpected Contamination Protocol which describes the procedures to be implemented in the event that potentially contaminated material is identified during construction, including:</p> <ul style="list-style-type: none"><li>• procedures for testing, removal and disposal of potentially contaminated material; and</li><li>• measures to ensure compliance with the requirements of SafeWork NSW and relevant guidelines.</li></ul> <p>The Applicant must not commence MOD 4 construction works until the Construction Environmental Management Plan is approved by the Secretary. The Applicant must implement the Construction Environmental Management Plan as approved by the Secretary.</p>	EMM general audit team	CEMP for MOD 4.	<p>Sighted MPO - Construction Environmental Management Plan, approved by DPE Secretary 10/3/2020. Available online (<a href="https://machenergyaustralia.com.au/wp-content/uploads/Mount-Pleasant-Operation-Redacted-Construction-Environmental-Management-Plan-MOD-4.pdf">https://machenergyaustralia.com.au/wp-content/uploads/Mount-Pleasant-Operation-Redacted-Construction-Environmental-Management-Plan-MOD-4.pdf</a>).</p> <p>a) Section 1.3 of the CEMP confirms consultation with EPA, MSC, Telstra and Ausgrid.</p> <p>b) Section 5 of the CEMP includes measures to minimise environmental impacts, disturbance and cumulative impacts.</p> <p>c) Section 9 of the CEMP details notification, handling and reporting systems.</p> <p>d) Section 5.5 and Appendix A of the CEMP address the noted requirements.</p> <p>e) Section 5.6 and Appendix B of the CEMP address the noted requirements.</p> <p>f) Section 5.7 and Appendix C of the CEMP address the noted requirements</p>	Compliant	
VISUAL						
Visual Amenity and Lighting						
45	<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;</p> <p>(b) ensure no outdoor lights shine above the horizontal; and</p> <p>(c) ensure that all external lighting associated with the development complies with Australian Standard AS4282 (INT) 1997 – Control of Obtrusive Effects of Outdoor Lighting or its latest version, to the satisfaction of the Secretary.</p>	EMM general audit team	Visual Impact Management Plan. Site inspection. Complaints: * 2020 - 16 complaints * 2021 - 14 complaints * 2022 - 1 complaint Sighted response to complaints and general inspections to sight lighting plant to the north west/west.	<p>The lighting plants are passed to full specifications when they are delivered to site. These meet Australian standards. Based on site communications lighting plants are pointed down and orientated to reduce visual impacts. Evidence of review and comms to site dated 1/3/2022.</p> <p>Lighting plant inspected during site visit which demonstrated lights facing down and not shining above horizon.</p> <p>The site inspection confirmed the site is managed generally in accordance with the Visual Impact Management Plan.</p> <p>EMM reviewed the complaints register found on the MPO website. There were 31 complaints related to lighting over 2020-2023. Sighted response process during site visit.</p>	Compliant	
Additional Visual Mitigation Measures						
46	<p>Upon receiving a written request from the owner of any residence on privately-owned land which has, or would have, significant direct view of the mining operations on site, the Applicant must implement visual mitigation measures (such as landscaping treatments or vegetation screens) on the land in consultation with the landowner. These measures must be reasonable and feasible, and directed toward minimising the visibility of the mining operations from the residence.</p> <p>If within 3 months of receiving this request from the owner, the Applicant and the owner cannot agree on the measures to be implemented, or there is a dispute about the implementation of these measures, then either party may refer the matter to the Secretary for resolution.</p> <p><i>Note: Except in exceptional circumstances, the Secretary will not require additional visual impact mitigation to be undertaken for residences that are more than 3 kilometres from the mining operations.</i></p>	EMM general audit team	N/A	MACH confirmed no request received during audit period.	Not triggered	
Visual Impact Management Plan						
47	<p>The Applicant must prepare a Visual Impact Management Plan to mitigate the visual impacts of the development to the satisfaction of the Secretary. This plan must:</p> <p>(a) be prepared in consultation with Council, and submitted to the Secretary for approval by 30 June 2019, unless otherwise agreed by the Secretary;</p> <p>(b) provide for the establishment of trees and shrubs and/or the construction of mounding or bunding:</p> <ul style="list-style-type: none"><li>• along the access road to the mine site;</li><li>• around the water storage dams and coal preparation plant;</li><li>• at other areas identified as necessary for the maintenance of satisfactory visual amenity;</li></ul> <p>(c) include details of the visual appearance of all buildings, structures, facilities or works (including paint colours and specifications), aimed at blending as far as possible with the surrounding landscape; and</p> <p>(d) include detailed measures to minimise the visual impacts of the MOD 4 rail infrastructure, including:</p> <ul style="list-style-type: none"><li>• details regarding any proposed light screens, earth bunds and screen planting; and</li><li>• procedures to monitor and maintain the effectiveness of visual impact mitigation measures for the life of the development.</li></ul> <p>The Applicant must implement the management plan as approved by the Secretary.</p>	EMM general audit team	<p>a) Current Visual Impact Management Plan approved by DPE on 31 October 2019. Appendix A - Consultee feedback was available in the site document.</p> <p>b) Contained in Section 5.5. Bunding shown in figure.</p> <p>c) Section 5.4</p> <p>d) Section 5, 6 and 8.</p>	<p>The lighting plants are passed to full specifications when they are delivered to site. These meet Australian standards. Based on site communications lighting plants are pointed down and orientated to reduce visual impacts. Evidence of third party audits sighted.</p> <p>Sample of lighting plants were reviewed as part of the audit. Which were orientated down.</p> <p>There are complaints relating to visual impacts with evidence provided to EMM illustrating the response by MACH Energy.</p>	Compliant	
BUSHFIRE MANAGEMENT						
48	<p>The Applicant must:</p> <p>(a) ensure that the development is suitably equipped to respond to any fires on site; and</p> <p>(b) assist the Rural Fire Service and emergency services as much as possible if there is a fire in the vicinity of the site.</p>	EMM general audit team	<p>a) Evidence of fire management including water trucks. Also some water trucks are road registered. There is an emergency response team.</p> <p>b) Copy of the Bushfire management plan sighted by EMM.</p>	Sighted fire management equipment and BMP during sight inspection.	Compliant	
WASTE						
Waste Minimisation and Disposal						



49	The Applicant must: (a) minimise the waste (including coal reject) generated by the development; (b) ensure that the waste generated by the development is appropriately stored, handled and disposed of in a lawful manner.	EMM general audit team	a) Based on the evidence provided the site has minimised the amount of waste being generated. b) Sighted appropriate waste storage and handling during site visit. Evidence of license contractor removing waste sighted.	Sighted implementation of waste management strategies during site visit. Sighted evidence of engagement of waste contractor and reporting requirements under the engagement contractor to identify areas of improvement.	Compliant																							
On-site Sewage																												
50	The Applicant must ensure that all sewage generated on site is treated and disposed of to the satisfaction of Council.	EMM general audit team	Sighted sample of sewage treatment plant inspections. Sighted Annual return sewage treatment plant inspection and maintenance reports. Sighted work orders for ongoing maintenance.	Sighted evidence of maintenance and management of Sewerage Treatment Plant. Outcomes reported in annual returns.	Compliant																							
Disposal of Fine Rejects																												
51	The Applicant must not emplace fine rejects in the southern catchment without the written approval of the Secretary	EMM general audit team	Based on site communications this has not been triggered. No evidence from inspection.	Site to reaffirm previous audit findings.	Not triggered																							
Waste Management Plan																												
52	The Applicant must prepare a Waste Management Plan for the development to the satisfaction of the Secretary. This plan must: (a) be prepared in consultation with DPE Water and the Resources Regulator, and submitted to the Secretary for approval prior to carrying any development on site; (b) describe the measures that would be implemented to avoid, minimise, reuse and recycle all waste streams generated by the development; (c) include a fines emplacement plan; and (d) a program to evaluate the fines emplacement plan and methods, with a view to emplacing fines within active mining areas. The Applicant must implement the management plan as approved by the Secretary.	EMM general audit team	a) Current version of Waste Management Plan approved by DPIE on 14 January 2019. Evidence of consultation provided in site version of the management plan. b) Section 5. c) Appendix 1. d) Section 7.2. Non - compliant for hydrocarbon and chemical storage. MIA and CHPP area: a) Small hydrocarbon spills identified around workshop and refuelling bay. b) There were 1,000 L pods located around the CHPP and MIA laydown areas (some full, some mostly empty) with oil and other chemicals.	Hydrocarbon spills to be managed in accordance with Waste Management Plan and spills procedure. 1000 litre pods to be stored within appropriately bunded areas.  <b>Recommendation (REC 8):</b> Ensure all chemicals/hydrocarbons are appropriately stored in bunded areas.	Non-compliant	NC6																						
REHABILITATION																												
Rehabilitation Objectives																												
53	The Applicant must rehabilitate the site in accordance with the provisions under the Mining Act 1992. This rehabilitation must be generally consistent with the conceptual final landform depicted in Figure 4 in Appendix 2, and comply with the objectives in Table 11.  <table><caption>Table 11: Rehabilitation Objectives</caption><tr><th>Feature</th><th>Objective</th></tr><tr><td>All areas of the site affected by the development</td><td><ul style="list-style-type: none"><li>Safe, stable &amp; non-polluting</li><li>Fit for the intended post-mining land use/s</li></ul></td></tr><tr><td>Areas proposed for native ecosystem re-establishment</td><td><ul style="list-style-type: none"><li>Restore self-sustaining native woodland ecosystems characteristic of vegetation communities found in the local area, as shown conceptually in Figure 4 in Appendix 2.</li><li>Establish areas of self-sustaining:<ul style="list-style-type: none"><li>riparian habitats, wetland, dry savanna, sub-rural re-established creek lines and retained water features;</li><li>potential habitat for threatened flora and fauna species; and</li><li>wildlife corridors, as far as is reasonable and feasible, and as shown conceptually in Figure 4 in Appendix 2.</li></ul></li></ul></td></tr><tr><td>Areas proposed for agricultural land</td><td><ul style="list-style-type: none"><li>Establish/restore grassland areas to support sustainable agricultural activities</li><li>Achieve the nominated land capability classification</li></ul></td></tr><tr><td>Other land affected by the development</td><td><ul style="list-style-type: none"><li>Restore ecosystem function, including maintaining or establishing self-sustaining ecosystems comprised of local native plant species (unless the Resources Regulator agrees otherwise)</li></ul></td></tr><tr><td>Final Landform</td><td><ul style="list-style-type: none"><li>Stable and sustainable for the intended post-mining land use/s</li><li>Integrated with surrounding natural landforms</li><li>Incorporate micro-relief and drainage lines that are consistent with surrounding topography, to the greatest extent practicable</li><li>Maximise surface water drainage to the natural environment (excluding final void catchment)</li></ul></td></tr><tr><td>Final voids</td><td><ul style="list-style-type: none"><li>Designed as long term groundwater sinks to maximise ground water flows across-back filled pits to the final void</li><li>Minimise to the greatest extent practicable:<ul style="list-style-type: none"><li>the size and depth of final voids;</li><li>the drainage catchment of final voids;</li><li>any high wind instability risk; and</li><li>the risk of flood interaction</li></ul></li></ul></td></tr><tr><td>Surface infrastructure of the development</td><td><ul style="list-style-type: none"><li>To be decommissioned and removed, unless the Resources Regulator agrees otherwise</li></ul></td></tr><tr><td>Rehabilitation materials</td><td><ul style="list-style-type: none"><li>Materials from areas disturbed under this consent (including topsoil, substrates and seeds) are to be recovered, managed and used as rehabilitation resources, to the greatest extent practicable</li></ul></td></tr><tr><td>Water quality</td><td><ul style="list-style-type: none"><li>Water retained on the site is fit for the intended post-mining land use/s</li><li>Water discharged from the site is suitable for receiving waters and fit for aquatic ecology and riparian vegetation</li></ul></td></tr><tr><td>Community</td><td><ul style="list-style-type: none"><li>Ensure public safety</li><li>Minimise adverse socio-economic effects associated with mine closure</li></ul></td></tr></table>	Feature	Objective	All areas of the site affected by the development	<ul style="list-style-type: none"><li>Safe, stable &amp; non-polluting</li><li>Fit for the intended post-mining land use/s</li></ul>	Areas proposed for native ecosystem re-establishment	<ul style="list-style-type: none"><li>Restore self-sustaining native woodland ecosystems characteristic of vegetation communities found in the local area, as shown conceptually in Figure 4 in Appendix 2.</li><li>Establish areas of self-sustaining:<ul style="list-style-type: none"><li>riparian habitats, wetland, dry savanna, sub-rural re-established creek lines and retained water features;</li><li>potential habitat for threatened flora and fauna species; and</li><li>wildlife corridors, as far as is reasonable and feasible, and as shown conceptually in Figure 4 in Appendix 2.</li></ul></li></ul>	Areas proposed for agricultural land	<ul style="list-style-type: none"><li>Establish/restore grassland areas to support sustainable agricultural activities</li><li>Achieve the nominated land capability classification</li></ul>	Other land affected by the development	<ul style="list-style-type: none"><li>Restore ecosystem function, including maintaining or establishing self-sustaining ecosystems comprised of local native plant species (unless the Resources Regulator agrees otherwise)</li></ul>	Final Landform	<ul style="list-style-type: none"><li>Stable and sustainable for the intended post-mining land use/s</li><li>Integrated with surrounding natural landforms</li><li>Incorporate micro-relief and drainage lines that are consistent with surrounding topography, to the greatest extent practicable</li><li>Maximise surface water drainage to the natural environment (excluding final void catchment)</li></ul>	Final voids	<ul style="list-style-type: none"><li>Designed as long term groundwater sinks to maximise ground water flows across-back filled pits to the final void</li><li>Minimise to the greatest extent practicable:<ul style="list-style-type: none"><li>the size and depth of final voids;</li><li>the drainage catchment of final voids;</li><li>any high wind instability risk; and</li><li>the risk of flood interaction</li></ul></li></ul>	Surface infrastructure of the development	<ul style="list-style-type: none"><li>To be decommissioned and removed, unless the Resources Regulator agrees otherwise</li></ul>	Rehabilitation materials	<ul style="list-style-type: none"><li>Materials from areas disturbed under this consent (including topsoil, substrates and seeds) are to be recovered, managed and used as rehabilitation resources, to the greatest extent practicable</li></ul>	Water quality	<ul style="list-style-type: none"><li>Water retained on the site is fit for the intended post-mining land use/s</li><li>Water discharged from the site is suitable for receiving waters and fit for aquatic ecology and riparian vegetation</li></ul>	Community	<ul style="list-style-type: none"><li>Ensure public safety</li><li>Minimise adverse socio-economic effects associated with mine closure</li></ul>	EMM general audit team supported by the EMM Ecology team	Annual Reviews for 2020, 2021 and 2022. Site inspection.	As per the 2022 Annual Review, 131 ha of land is currently under active rehabilitation with a further 32 ha being prepared for rehabilitation. There is a 151 ha forecasted for rehabilitation in 2023.  Rehabilitation of the Eastern Out of Pit Emplacement progressed. An additional 32.4 ha was rehabilitated, which included: - bulk and detailed re-shaping of overburden material to final landform; - installation of habitat features such as habitat/stag trees, log piles and rock piles across the rehabilitation area; - topsoil spreading to a minimum depth of 100 mm; - gypsum application at a rate of 10 tonnes per hectare (t/ha); - deep ripping/timing along the contour of the final landform to a depth of 500 mm; - planting of tube stock including ground, middle and upper stratum species of relevant target PCTs; - direct/hand seeding of endangered ecological community tree/shrub/grass indicative species plus an additional grass cover crop; and - planting of approximately 100 native trees per ha. Rehabilitation areas were subject to ongoing weed and pest control measures throughout the reporting period to facilitate and promote successful vegetation establishment.  The overarching objective for rehabilitation of the Fines Emplacement Area (FEA) is to establish a safe, stable and non-polluting landform with a sustainable surface cover that minimises erosion (to prevent exposure of the underlying fines material) and sustains grassland vegetation in the long-term. During the reporting period, MACH Energy operated the FEA using sub-aerial deposition which involves an extended period of air drying that maximises in-situ tailings densities, and in turn, maximises the storage efficiency of the facility as well as providing a more competent fines surface for future rehabilitation purposes.	Compliant	
Feature	Objective																											
All areas of the site affected by the development	<ul style="list-style-type: none"><li>Safe, stable &amp; non-polluting</li><li>Fit for the intended post-mining land use/s</li></ul>																											
Areas proposed for native ecosystem re-establishment	<ul style="list-style-type: none"><li>Restore self-sustaining native woodland ecosystems characteristic of vegetation communities found in the local area, as shown conceptually in Figure 4 in Appendix 2.</li><li>Establish areas of self-sustaining:<ul style="list-style-type: none"><li>riparian habitats, wetland, dry savanna, sub-rural re-established creek lines and retained water features;</li><li>potential habitat for threatened flora and fauna species; and</li><li>wildlife corridors, as far as is reasonable and feasible, and as shown conceptually in Figure 4 in Appendix 2.</li></ul></li></ul>																											
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Water quality	<ul style="list-style-type: none"><li>Water retained on the site is fit for the intended post-mining land use/s</li><li>Water discharged from the site is suitable for receiving waters and fit for aquatic ecology and riparian vegetation</li></ul>																											
Community	<ul style="list-style-type: none"><li>Ensure public safety</li><li>Minimise adverse socio-economic effects associated with mine closure</li></ul>																											
54	By the end of January 2019, unless otherwise agreed by the Secretary, the Applicant must prepare a Rehabilitation Strategy for the development to the satisfaction of the Secretary. This strategy must: (a) be prepared by a suitably qualified and experienced person/s whose appointment has been endorsed by the Secretary; (b) be prepared in consultation with the Resources Regulator and Council; (c) build upon the Rehabilitation Objectives in Table 11 and the conceptual final landform depicted in Figure 4 in Appendix 2, including identification of opportunities for increasing the areas of woodland and habitat connectivity within the rehabilitated landscape; (d) include details of the canopy, sub-canopy, understorey and ground strata species to be established in the rehabilitation areas, with a particular focus on ensuring the achievement of an appropriate level of diversity and mix of functional groups within each target community; (e) include an indicative schedule for the staged rehabilitation of the development; (f) include a protocol for periodic trials to demonstrate that the proposed agricultural land capability of grassland areas in the final landform is being achieved; and (g) include a protocol for periodic trials to demonstrate that the target vegetation communities proposed in rehabilitated woodland areas and fauna habitat is being achieved. The Applicant must implement the approved strategy as approved from time to time by the Secretary.	EMM general audit team	Sighted MPO Rehabilitation Management Plan (RMP) dated 1 August 2022, superseding the previous Rehabilitation Strategy. a) RMP does not confirm that it has been prepared by a suitably qualified persons whose appointment has been endorsed by the Secretary. Evidence supplied by MACH to EMM confirm it was. b) RMP section 4.2 notes consultation undertaken with Resource Regulator and MSC. It further notes consultation undertaken with the CCC, DPE, DPE-Water, BCD and DPI-Agriculture. c) Rehabilitation objectives are outlined in Section 4 of the RMP. d) RMP Section 6.2.5 outlines (Plant Community Types) to be established within rehabilitated areas. e) The RMP does not provide an indicative schedule for the stage rehabilitation of the development. It is noted that this is identified within the MACH Annual Rehabilitation and Forward Work Program. f) RMP Section 8 outlines processes to establish agricultural rehabilitation establishment.	RMP does not identify that it has been prepared by a suitably qualified person whose appointment has been approved by the Secretary. It is recommended that this is correct. Noting the previous version of the document as noted in the previous audit was prepared by a suitable qualified person.  <b>Recommendation:</b> - REC 9 - Update Table 2-1 of the RMP to include Schedule 3, Condition 54 of DA 92/97. - REC 10 - Update RMP to make reference to the Annual Rehabilitation and Forward Work Program to address the requirement of the RMP to include an indicative schedule. - REC 11 - Address erosion issues within the rehabilitation areas which were observed during the site visit.	Compliant																							
Progressive Rehabilitation																												
55	The Applicant must rehabilitate the site progressively, that is, as soon as reasonably practicable following disturbance. All reasonable steps must be taken to minimise the total area exposed at any time. Interim stabilisation and temporary vegetation strategies must be employed when areas prone to dust generation, soil erosion and weed incursion cannot be permanently rehabilitated. <i>Note: It is accepted that some parts of the site that are progressively rehabilitated may be subject to further disturbance at some later stage of the development.</i>	EMM general audit team	Evidence of some progressive rehabilitation. Namely around the eastern dump area. The mine plan is designed to minimise disturbance areas. Forward Work Program sighted confirming proposed progressive rehabilitation.	Sighted progressive rehabilitation during site inspection and documents supporting the implementation of progressive rehabilitation.	Compliant																							
55A	The Applicant must implement all reasonable and feasible measures to provide for the interim stabilisation and temporary vegetation of the existing rail loop and infrastructure corridor, as soon as reasonably practicable following the removal of infrastructure as required under condition 37. <i>Note: The Applicant's obligations under this condition will cease following the transfer or grant of a mining lease over that part of ML 1645 south of Wybong Road to the operator of Bengalla mine (or its nominee).</i>	EMM general audit team	Sighted rehabilitation works undertaken within the existing rail loop infrastructure corridor which has since been provided to Bengalla.	Sighted rehabilitation works undertaken within the existing rail loop infrastructure corridor which has since been provided to Bengalla.	Compliant																							
Rehabilitation Management Plan																												

56	By the end of April 2019, unless otherwise agreed by the Secretary, the Applicant must prepare a Rehabilitation Management Plan for the development in accordance with the provisions under the <i>Mining Act 1992</i> .	EMM general audit team	Sighted MPO Rehabilitation Management Plan (RMP) dated 1 August 2022.	Sighted document.	Compliant	
<b>SCHEDULE 4 - ADDITIONAL PROCEDURES</b>						
<b>NOTIFICATION OF LANDOWNERS</b>						
1	By the end of December 2011, the Applicant must: (a) notify in writing the owners of: • the land listed in Table 1 of Schedule 3 that they have the right to require the Applicant to acquire their land at any stage of the development; • any residence on the noise-affected land in Table 1 or Table 2 of Schedule 3 that they are entitled to ask for additional noise mitigation measures to be installed at their residence at any stage of the development; • any residences on the air quality-affected land listed in Table 1 that they are entitled to ask for additional air quality mitigation measures to be installed at their residence at any stage of the development; • any privately-owned land within 2 kilometres of the approved open cut mining pit on the site that they are entitled to ask for an inspection to establish the baseline condition of any buildings and/or structures on their land, or to have a previous property inspection updated; and (b) send a copy of the NSW Health fact sheet entitled "Mine Dust and You" (as may be updated from time to time) to the owners and/or existing tenants of any land (including mine-owned land) where the predictions in the documents listed in condition 2(a) of Schedule 2 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. Within one month of any modification that leads to new land being added to Tables 1 or 2 of Schedule 3, the Applicant must notify affected land owners in accordance with the requirements of paragraph (a).	EMM general audit team	N/A	Historical condition. Outside of audit period.	Not triggered	
1A	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, the Applicant must: (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 (b) advise the prospective tenants of the rights they would have under this consent, to the satisfaction of the Secretary.	EMM general audit team	Residential agreements. Letters to/from landowners advising of monitoring exceedances.	The residential agreement contains a section which discusses the 'right to mine'. Signed agreements therefore acknowledge the potential impacts of mining.	Compliant	
2	As soon as practicable after obtaining monitoring results showing: (a) exceedance of the relevant criteria in Schedule 3, the Applicant must notify the affected landowner and tenants in writing of the exceedance, and provide regular monitoring results to each of these parties until the development is complying with the relevant criteria again; and/or (b) an exceedance of the relevant criteria of 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).	EMM general audit team	Residential agreements. Letters to/from landowners advising of monitoring exceedances.	The residential agreement contains a section which discusses the 'right to mine'. Signed agreements therefore acknowledge the potential impacts of mining.  Letters were provided to landowners following exceedances which discuss additional monitoring results and any corrective actions.	Compliant	
<b>INDEPENDENT REVIEW</b>						
3	If an owner of privately-owned land considers the development to be exceeding the criteria in Schedule 3, then he/she may ask the Secretary in writing for an independent review of the impacts of the development on his/her land. If the Secretary is not satisfied that an independent review is warranted, the Secretary will notify the landowner in writing of that decision, and the reasons for that decision, within 21 days of the request for a review. If the Secretary is satisfied that an independent review is warranted, then within 2 months of the Secretary's decision, the Applicant must: (a) commission a suitably qualified, experienced and independent expert, whose appointment has been approved by the Secretary, to: • consult with the landowner to determine his/her concerns; • conduct monitoring to determine whether the development is complying with the relevant criteria; and • if the development is not complying with these criteria then: o determine if more than one mine is responsible for the exceedance, and if so the relative share of each mine towards the impact on the land; o identify the measures that could be implemented to ensure compliance with the relevant criteria; and (b) give the Secretary and landowner a copy of the independent review.	EMM general audit team	Structural Assessment of Mine Blasting Impacts. Structural Engineering reports. Letters to landowners advising that they would engage an independent engineering consultant to complete a structural assessment.	Evidence provided to EMM shows that independent assessments of damage caused by blasting incidents were completed within 2 months following request from the landowner.	Compliant	
4	Deleted		N/A		Not triggered	
5	Deleted		N/A		Not triggered	
<b>LAND ACQUISITION</b>						
6	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: (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: • existing and permissible use of the land, in accordance with the applicable planning instruments at the date of the written request; and • presence of improvements on the land and/or any approved building or structure which has been physically commenced at the date of the landowner's written request, and is due to be completed subsequent to that date, but excluding any improvements that have resulted from the implementation of the additional mitigation measures required under condition 2 of Schedule 3; (b) the reasonable costs associated with: • relocating within the Muswellbrook, Singleton or Scone local government area, or to any other local government area determined by the 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 (c) reasonable compensation for any disturbance caused by the land acquisition process. However, if at the end of this period, the Applicant and landowner cannot agree on the acquisition price of the land and/or the terms upon which the land is to be acquired, then either party may refer the matter to the Secretary for resolution. Upon receiving such a request, the Secretary shall request the President of the NSW Division of the Australian Property Institute to appoint a qualified independent valuer to: • consider submissions from both parties; • determine a fair and reasonable acquisition price for the land and/or the terms upon which the land is to be acquired, having regard to the matters referred to in paragraphs (a)-(c) above; • prepare a detailed report setting out the reasons for any determination; and • provide a copy of the report to both parties. Within 14 days of receiving the independent valuer's report, the Applicant must make a binding written offer to the landowner to purchase the land at a price not less than the independent valuer's determination. However, if either party disputes the independent valuer's determination, then within 14 days of receiving the independent valuer's report, they may refer the matter to the Secretary for review. Any request for a review must be accompanied by a detailed report setting out the reasons why the party disputes the independent valuer's determination. Following consultation with the independent valuer and both parties, the Secretary will determine a fair and reasonable acquisition price for the land, having regard to the matters referred to in paragraphs (a)-(c) above, the independent valuer's report, the detailed report of the party that disputes the independent valuer's determination and any other relevant submissions. Within 14 days of this determination, the Applicant must make a binding written offer to the landowner to purchase the land at a price not less than the Secretary's determination. If the landowner refuses to accept the Applicant's binding written offer under this condition within 6 months of the offer being made, then the Applicant's obligations to acquire the land shall cease, unless the Secretary determines otherwise.	EMM general audit team	N/A	There have been no instances of acquisition triggered under this development consent.	Not triggered	
7	The Applicant must pay all reasonable costs associated with the land acquisition process described in condition 6 above, including the costs associated with obtaining Council approval for any plan of subdivision (where permissible), and registration of this plan at the Office of the Registrar-General.	EMM general audit team	N/A	There have been no instances of acquisition triggered under this development consent.	Not triggered	
<b>SCHEDULE 5 - ENVIRONMENTAL MANAGEMENT, REPORTING AND AUDITING</b>						
<b>ENVIRONMENTAL MANAGEMENT</b>						
<b>Environmental Management Strategy</b>						

1	<p>If the Secretary requires, the Applicant must prepare an Environmental Management Strategy for the development to the satisfaction of the Secretary. This strategy must:</p> <ul style="list-style-type: none"> <li>(a) be submitted to the Secretary for approval prior to carrying out any development on site;</li> <li>(b) provide the strategic framework for environmental management of the development;</li> <li>(c) identify the statutory approvals that apply to the development;</li> <li>(d) describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the development;</li> <li>(e) describe the procedures that would be implemented to: <ul style="list-style-type: none"> <li>• keep the local community and relevant agencies informed about the operation and environmental performance of the development;</li> <li>• receive, handle, respond to, and record complaints;</li> <li>• resolve any disputes that may arise during the course of the development;</li> <li>• respond to any non-compliance;</li> <li>• respond to emergencies; and</li> </ul> </li> <li>(f) include: <ul style="list-style-type: none"> <li>• copies of any strategies, plans and programs approved under the conditions of this consent; and</li> <li>• a clear plan depicting all the monitoring to be carried out in relation to the development.</li> </ul> </li> </ul> <p>The Applicant must implement the approved strategy as approved from time to time by the Secretary.</p>	EMM general audit team	Environmental Management Strategy	<p>Sighted EMS dated 20 May 2021, approved by DPE Secretary 20/5/21.</p> <ul style="list-style-type: none"> <li>a) Works commenced prior to audit period. Current EMS approved by DPE Secretary 20/5/21.</li> <li>b) Sections 3 and 4 of EMS.</li> <li>c) Section 4 of EMS.</li> <li>d) Section 5.1 and Appendix B of EMS.</li> <li>e) Section 5 of the EMS.</li> <li>f) Supporting documents referenced throughout EMS and linked to MPO website within Appendix C of the EMS. Monitoring locations identified in Figure 5 of EMS.</li> </ul>	Compliant	
<b>Adaptive Management</b>						
1A	<p>The Applicant must assess and manage development-related risks to ensure that there are no exceedances of the criteria and/or performance measures in Schedule 3. Any exceedance of these criteria and/or performance measures constitutes a breach of this consent and may be subject to penalty or offence provisions under the EP&amp;A Act or EP&amp;A Regulation.</p> <p>Where any exceedance of these criteria and/or performance measures has occurred, the Applicant must, at the earliest opportunity:</p> <ul style="list-style-type: none"> <li>(a) take all reasonable and feasible steps to ensure that the exceedance ceases and does not recur;</li> <li>(b) consider all reasonable and feasible options for remediation (where relevant) and submit a report to the Department describing those options and any preferred remediation measures or other course of action; and</li> <li>(c) implement remediation measures as directed by the Secretary, to the satisfaction of the Secretary.</li> </ul>	EMM general audit team	<p>Annual Reviews for 2020, 2021, 2022.</p> <p>Monthly, quarterly and annual environmental reports.</p>	Annual reports identify dust, blast fume, noise and water discharge as areas in which improvement measures can be enacted to ensure exceedances cease or does not occur. The Annual Reviews confirm that all reasonable and feasible measures to reduce the likelihood of exceedance events were implemented and reported, as required.	Compliant	
<b>Management Plan Requirements</b>						
2	<p>The Applicant must ensure that the management plans required under this consent are prepared in accordance with any relevant guidelines, and include:</p> <ul style="list-style-type: none"> <li>(a) detailed baseline data;</li> <li>(b) a description of: <ul style="list-style-type: none"> <li>• the relevant statutory requirements (including any relevant consent, licence or lease conditions);</li> <li>• any relevant limits or performance measures/criteria;</li> <li>• the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the development or any management measures;</li> </ul> </li> <li>(c) a description of the measures that would be implemented to comply with the relevant statutory requirements, limits, or performance measures/criteria;</li> <li>(d) a program to monitor and report on the: <ul style="list-style-type: none"> <li>• impacts and environmental performance of the development;</li> <li>• effectiveness of any management measures (see c above);</li> </ul> </li> <li>(e) a contingency plan to manage any unpredicted impacts and their consequences;</li> <li>(f) a program to investigate and implement ways to improve the environmental performance of the development over time;</li> <li>(g) a protocol for managing and reporting any: <ul style="list-style-type: none"> <li>• incidents;</li> <li>• complaints;</li> <li>• non-compliances with statutory requirements; and</li> <li>• exceedances of the impact assessment criteria and/or performance criteria; and</li> </ul> </li> <li>(h) a protocol for periodic review of the plan.</li> </ul>	All teams in relation to their applicable management plan	Management plans	<p>EMM sighted all management plans prepared for MPO and can confirm that all plans have been prepared to cover the requirements of this condition.</p> <p>These are covered in various sections of the management plans.</p>	Compliant	
<b>Annual Review</b>						
3	<p>By the end of March each year (or other such timing as agreed by the Secretary), the Applicant must submit a report to the Department reviewing the environmental performance of the development to the satisfaction of the Secretary. This review must:</p> <ul style="list-style-type: none"> <li>(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 next calendar year;</li> <li>(b) include a comprehensive review of the monitoring results and complaints records of the development over the past calendar year, which includes a comparison of these results against the: <ul style="list-style-type: none"> <li>• relevant statutory requirements, limits or performance measures/criteria;</li> <li>• monitoring results of previous years; and</li> <li>• relevant predictions in the documents listed in condition 2(a) of Schedule 2;</li> </ul> </li> <li>(c) identify any non-compliance over the last year, and describe what actions were (or are being) taken to ensure compliance;</li> <li>(d) identify any trends in the monitoring data over the life of the development;</li> <li>(e) identify any discrepancies between the predicted and actual impacts of the development, and analyse the potential cause of any significant discrepancies; and</li> <li>(f) describe what measures will be implemented over the next year to improve the environmental performance of the development.</li> </ul>	EMM general audit team	Annual Reviews for 2020, 2021 and 2022.	<p>The 2020 Annual Review was lodged to the DPE on 31 March 2021. Additional information was required and the revised version was submitted on 22 July 2021 and approved by DPE 23 July 2021.</p> <p>The 2021 Annual Review was lodged to the DPE on 30 March 2022 and approved by DPE 1 July 2022.</p> <p>The 2022 Annual Review was lodged to the DPE on 31 March 2023.</p>	Compliant	
<b>Revision of Strategies, Plans and Programs</b>						
4	<p>Within 3 months of:</p> <ul style="list-style-type: none"> <li>(a) the submission of an annual review under condition 3 above;</li> <li>(b) the submission of an incident report under condition 7 below;</li> <li>(c) the submission of an audit under condition 9 below; and</li> <li>(d) any modification to the conditions of this consent,</li> </ul> <p>the Applicant must review, and if necessary revise, the strategies, plans, and programs required under this consent to the satisfaction of the Secretary. Within 4 weeks of conducting any such review, the Applicant must advise the Secretary of the outcomes of the review, and submit any revised documents for the approval of the Secretary.</p> <p>Notes:</p> <ul style="list-style-type: none"> <li>• The purpose of this condition is to ensure that strategies, plans and programs are regularly updated to incorporate any measures recommended to improve environmental performance of the project.</li> <li>• In the event of an inconsistency between condition 4(d) above and any condition in Schedule 3 of this consent, the latter prevails.</li> </ul>	EMM general audit team	<p>Register of management plan updates.</p> <p>Management plans.</p> <p>Letters to/from DPE.</p>	MOD 5 was approved on 29 June 2022. DPE were notified on 29 August 2022 that no updates to management plans were required following the approval of MOD 5.	Compliant	
<b>Updating &amp; Staging Strategies, Plans or Programs</b>						
4A	<p>The Applicant may at any time submit revised strategies, plans or programs for the approval of the Secretary. With the agreement of the Secretary, the Applicant may also submit any strategy, plan or program required by this consent on a staged basis.</p> <p>With the agreement of the Secretary, the Applicant may prepare a revision or stage of any strategy, plan or program required under this consent without undertaking consultation with all parties nominated under the applicable condition in this consent.</p> <p>Notes:</p> <ul style="list-style-type: none"> <li>• While any strategy, plan or program may be submitted on a staged basis, the Applicant must ensure that the existing operations on site are covered by suitable strategies, plans or programs at all times.</li> <li>• 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.</li> </ul>	EMM general audit team	Noted.	The management plans have been regularly updated during the life of the operations.	Compliant	
<b>Management of Cumulative Impacts</b>						

5	In conjunction with the owners of the nearby mines (including the Bengalla mine), the Applicant must use its best endeavours to minimise the cumulative impacts of the development on the surrounding area to the satisfaction of the Secretary. <i>Note: Nothing in this consent is to be construed as requiring the Applicant to act in a manner which is contrary to the Trade Practices Act 1974.</i>	EMM general audit team	Quarterly cumulative Framework Meeting Minutes between MPO, BHP and Bengalla mines. Council website.	EMM sighted meeting minutes between MPO, BHP's Mt Arthur Coal mine and BMC's Bengalla mine which are held on a quarterly basis. The meetings are held to discuss site operations and initiatives across the mines.  EMM understands General Manager meetings are also held on a quarterly basis between the mines.  The mines share data in a collaborative way with regards to met data, air quality and noise.  Council operates a blast notification page on their website for coal mines in the area.	Compliant	
<b>Community Consultative Committee</b>						
6	The Applicant must operate a Community Consultative Committee (CCC) for the development to the satisfaction of the Secretary. This CCC must be operated in general accordance with the Department's Community Consultative Committee Guidelines State Significant Projects November 2016, or its latest version. <i>Note: The CCC is an advisory committee. The Department and other relevant agencies are responsible for ensuring that the Applicant complies with this consent.</i>	EMM general audit team	CCC meeting minutes. MPO website.	No evidence sighted to suggest non-compliance with this condition. Copies of the CCC minutes are available on the MPO website.	Compliant	
<b>Incident Notification</b>						
7	The Applicant must immediately notify the Department and any other relevant agencies after it becomes aware of an incident. The notification must be in writing via the Department's Major Projects Website and identify the development (including the development application number and name) and set out the location and nature of the incident.	EMM general audit team	2020 Annual Review = 1 reportable incident: * 15/6/20 - blast fume event.  2021 Annual Review = 9 reportable incidents: * 21/1/21 - MOD 4 out of hours construction works. * 8/3/21 - Water discharge event. * 31/3/21 - MOD 4 out of hours construction works. * 9/6/21 - Water discharge event. * 11/6/21 - Elevated EC levels at surface water site W17 on three consecutive monitoring rounds. * 27/8/21 - Noise exceedance. * 12/11/21 - Water discharge event. * 8/12/21 - Water discharge event. * 9/12/21 - Water discharge event.  2022 Annual Review = 5 reportable incidents: * 8/3/22 - Water discharge event. * 6/5/22 - Spontaneous combustion event * 2/9/22 - Blast overpressure exceedance. * 21/10/22 - Water discharge event.	EMM sighted evidence of submission via the portal and written notification of the incidents to DPE with in 7 days of becoming aware of the incident.	Compliant	
<b>Non-Compliance Notification</b>						
7A	Within seven days of becoming aware of a non-compliance, the Applicant must notify the Department of the non-compliance. The notification must be in writing via the Department's Major Projects Website and identify the development (including the development application number and name), set out the condition of this consent that the development is non-compliant with, why it does not comply and the reasons for the non-compliance (if known) and what actions have been, or will be, undertaken to address the non-compliance. <i>Note: A non-compliance which has been notified as an incident does not need to also be notified as a non-compliance.</i>	EMM general audit team	Evidence of submission via the portal. Written notifications to DPE.	EMM sighted evidence of submission via the portal and written notification of the non-compliance to DPE with in 7 days of the date on which they became aware of the non-compliance.	Compliant	
<b>Monitoring and Environmental Audits</b>						
7B	Any condition of this consent that requires the carrying out of monitoring or an environmental audit, whether directly or by way of a plan, strategy or program, is taken to be a condition requiring monitoring or an environmental audit under Division 9.4 of Part 9 of the EP&A Act. This includes conditions in respect of incident notification, reporting and response, non-compliance notification, compliance report and independent audit. <i>Note: For the purposes of this condition, as set out in the EP&amp;A Act, "monitoring" is monitoring of the development to provide data on compliance with the consent or on the environmental impact of the development, and an "environmental audit" is a periodic or particular documented evaluation of the development to provide information on compliance with the consent or the environmental management or impact of the development.</i>	EMM general audit team	N/A	Noted.	Compliant	
<b>Regular Reporting</b>						
8	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, and to the satisfaction of the Secretary.	EMM general audit team	MPO website. Monthly environmental monitoring reports. CCC minutes. Complaints register. Annual reviews	A review of the MPO website show monthly environmental performance reports from May 2018 to January 2023. The website also contains copies of the Annual Reviews, CCC minutes and complaints registers.	Compliant	
<b>INDEPENDENT ENVIRONMENTAL AUDIT</b>						
9	By the end of March 2014, and every 3 years thereafter, unless the Secretary directs otherwise, the Applicant must commission, commence and pay the full cost of an Independent Environmental Audit of the development. This audit must: (a) be conducted by a suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Secretary; (b) include consultation with the relevant agencies and the CCC; (c) assess the environmental performance of the development and whether it is complying with the requirements in this consent and any relevant EPL or Mining Lease or necessary water licences (including any assessment, plan or program required under these approvals); (d) review the adequacy of strategies, plans or programs required under the abovementioned approvals (including whether the development has met or is trended towards the progressive performance and completion criteria detailed in these strategies, plans or programs); (e) if necessary, recommend appropriate measures or actions to improve the environmental performance of the development, and/or any strategy, plan or program required under the abovementioned approvals; and (f) be conducted and reported to the satisfaction of the Secretary. <i>Notes:</i> • This audit team must be led by a suitably qualified auditor and include experts in any fields specified by the Secretary.	EMM general audit team	a) Endorsement letter from DPE dated 20/2/2023, attached as Appendix B. b) Evidence of consultation in Section 2.6 and 3.8, and Appendix C of Audit report. c) Assessed throughout and attached as Appendix A of audit report. d) Assessed throughout and attached as Appendix A of audit report. e) Section 4 of Audit Report. f) This IEA will be submitted to DPE for approval within 2 months of conducting the site inspection.	The 2020 IEA was approved by DPE on 6/7/2020  This IEA covers the audit period from 28 February 2020 to 6 March 2023.  The IEA has been prepared in accordance with this condition and the requirements of the Independent Audit guidelines (2020).	Compliant	
10	Within 12 weeks of commencing any audit, or as otherwise agreed by the Secretary, the Applicant must submit a copy of the audit report to the Secretary and any other NSW Government agency that requests it, together with its response to any recommendations contained in the audit report and a timetable for the implementation of these recommendations, as required. The Applicant must implement the audit report recommendations, to the satisfaction of the Secretary.	EMM general audit team	Letter from DPE dated 6/7/2020 confirming the audit satisfies the requirements of the consent.	The previous audit was first submitted to DPE on 27 February 2018. Evidence of resubmission on 18 May 2018. Whilst this exceeds the 12 week period, correspondence with DPE permitting an extension was sighted.	Compliant	
<b>ACCESS TO INFORMATION</b>						
11	The Applicant must: (a) make the following information publicly available on its website: • the documents listed in condition 2(a) of Schedule 2; • all current statutory approvals for the development; • approved strategies, plans and programs required under the conditions of this consent; • a comprehensive summary of the monitoring results of the development, which have been reported in accordance with the various plans and programs approved under the conditions of this consent; • a complaints register, which is to be updated on a monthly basis; • minutes of CCC meetings; • the annual reviews (over the last 5 years); • any independent environmental audit, and the Applicant's response to the recommendations in any audit; • any other matter required by the Secretary; and (b) keep this information up to date, to the satisfaction of the Secretary.	EMM general audit team	Review of the MPO website: <a href="https://machenergyaustralia.com.au/mount-pleasant/documentation/">https://machenergyaustralia.com.au/mount-pleasant/documentation/</a>	A review of the MPO website shows that all information listed under condition 11 is uploaded to the website.  On each occasion the complaint was managed in accordance with the Complaints Response Protocol outlined in Section 5.4 and Figure 6 Environmental Management Strategy (EMS). Feedback on the investigation was provided within the approved timeframe, however on at least one occasion the investigation was awaiting further information/confirmation from the EPA.	Compliant	



Table A.2 - DA 92/97 Statement of Commitments

Environmental aspect	Requirement	Audit team responsible for condition	Evidence collected	Independent Audit Findings and Recommendations	Compliance status	Unique Identification Non-compliance
APPENDIX 3 - STATEMENT OF COMMITMENTS						
Noise and vibration	<ul style="list-style-type: none"><li>• A NMP will be prepared in accordance with the development consent.</li><li>• The NMP will be extended to include management of potential noise emissions associated with the MOD 4 rail infrastructure. The plan will also consider pro- active and predictive modelling and management, and protocols for managing noise during adverse meteorological conditions.</li><li>• Noise monitoring will continue to be undertaken in accordance with the development consent.</li><li>• Implementation of the following feasible and reasonable mitigation measures:<ul style="list-style-type: none"><li>- Deleted;</li><li>- plant will operate in less exposed areas during the more sensitive night period;</li><li>- procurement of new and best available technology plant;</li><li>- provision of noise suppression on all mobile plant. It anticipated that the noise suppression technology will require an outlay of capital expenditure of between \$15M and \$20M; and</li><li>- updating the comprehensive operational noise management plan to include real-time back to base noise monitoring using the best available technology.</li></ul></li><li>• The Applicant is committed to working with its communities and extend the opportunity for upfront acquisition upon request to the privately-owned properties listed in Table 1 of Schedule 3.</li></ul>	Bridges Acoustics	Noise management plan	A review of the Noise Management Plan indicates: Section 6.1.5 notes the requirement to use rolling stock that complies with the Sydney Trains EPL 12208 and ARTC EPL 3142. Section 8.1 includes a commitment to design the relocated rail spur to minimise wheel and brake squeal. Section 8.4 of the Plan describes the predictive modelling procedure, while Section 8.5 describes real time response protocols to manage noise under adverse meteorological conditions. Section 8.2 of the Plan includes mitigation measures including plant not operating in exposed areas and noise suppression on major plant.	Compliant	
Ecology	<ul style="list-style-type: none"><li>• Deleted</li><li>• Details of the rehabilitation of the infrastructure area upon decommissioning will be provided in the REMP.</li><li>• Ecological management for the Mount Pleasant Project will be undertaken in accordance with the existing development consent.</li></ul>	EMM Ecology team	Rehabilitation management plan. Biodiversity management plan.	Section 6.2.2 of the REMP outlines the requirements of rehabilitation of the site following decommissioning. It states that a detailed Mine Closure Plan will be developed prior to the close of MPO.  The site audit indicated that the site is generally being managed in accordance with the BMP and existing development consent.	Compliant	
Air quality	<ul style="list-style-type: none"><li>• Air quality management for the Mount Pleasant Project will be undertaken in accordance with the Air Quality Management Plan which is a requirement under the existing development consent.</li></ul>	EMM Air quality team	AQGHGMP. Annual Reviews for 2020, 2021 and 2022. Site inspection.	Auditors during site tour found that management measures were compliant with those listed in the AQGHGMP (see Air Quality & GHG MP tab).	Compliant	
Aboriginal cultural heritage	<ul style="list-style-type: none"><li>• Aboriginal cultural heritage management will continue to be undertaken in accordance with relevant Applicant procedures.</li><li>• Deleted</li><li>• Where site avoidance is impossible, cultural heritage management approaches that are set out in the CHMP for the Mount Pleasant Project area will be applied. This will include lodging an application for the relevant AHIPs under section 90 of the NPW Act.</li><li>• Deleted</li><li>• Aboriginal cultural heritage sites that cannot be avoided will be mitigated by standard salvage collection measures in accordance with the Aboriginal Heritage Management Plan, following the issue of an AHIP (section 90, NPW Act).</li><li>• The Aboriginal Heritage Management Plan will be revised to include the proposed modifications and any requirements specified by the regulator.</li><li>• Any mitigation salvage will be staged over time based upon mine operation plan requirements and the zoning regime of the CHMP.</li><li>• All cultural materials collected will be stored in a storage facility to be established at the Mount Pleasant Project or VCA under an approved Care and Control Permit.</li><li>• All cultural heritage sites not affected by the proposed development will be managed in situ in accordance with the Aboriginal Heritage Management Plan procedures for long-term protective management and to minimise future development disturbance.</li><li>• Sites that are assessed as vulnerable to damage due to the proximity to roads and tracks or other operational infrastructure will be appropriately buffered and barricaded in accordance with existing site protection protocols including monitoring protocols.</li></ul>	EMM general audit team	Annual Reviews for 2020, 2021 and 2022. Aboriginal Heritage Management Plan. Site inspection.	No issues identified in Annual reviews. EMM sighted fenced off Aboriginal heritage items at site. No evidence of non compliances associated with Aboriginal Cultural Heritage. Effective implementation of the Aboriginal Heritage Management Plan. Evidence of pre clearance permits and salvage requirements.	Compliant	
Visual amenity	<ul style="list-style-type: none"><li>• Visual amenity management will be undertaken in accordance with the development consent, which requires the preparation of a Visual Impact Management Plan.</li><li>• Lighting management will be undertaken in accordance with the development consent, including preparation of an engineering report regarding light emissions.</li></ul>	EMM general audit team	Visual Impact Management Plan. Site inspection. Complaints: * 2020 - 16 complaints * 2021 - 14 complaints * 2022 - 1 complaint Sighted response to complaints and general inspections to sight lighting plant to the north west/west.	The lighting plants are passed to full specifications when they are delivered to site. These meet Australian standards. Based on site communications lighting plants are pointed down and orientated to reduce visual impacts. Evidence of review and comms to site dated 1/3/2022. Lighting plant inspected during site visit which demonstrated lights facing down and not shining above horizon. The site inspection confirmed the site is managed generally in accordance with the Visual Impact Management Plan. EMM reviewed the complaints register found on the MPO website. There were 31 complaints related to lighting over 2020-2023. Sighted response process during site visit.	Compliant	
Removal of Mount Pleasant Infrastructure South of Wybong Road	<ul style="list-style-type: none"><li>• MACH Energy Australia Pty Ltd (MACH Energy) or any person/s who rely on any development consent to carry out the Mount Pleasant development (as modified or replaced by a new development consent from time to time) will, by no later than 31 October 2022:<ul style="list-style-type: none"><li>a) remove all infrastructure associated with the Development within Mining Lease No. 1645 (ML 1645) south of Wybong Road (other than infrastructure which the operator of the Bengalla Mine agrees with MACH Energy in writing can remain in situ);</li><li>b) do all things available to transfer or cause the grant of a mining lease over that part of ML 1645 south of Wybong Road to the operator of Bengalla Mine or its nominee;</li><li>c) transfer the freehold land owned by MACH Energy within ML 1645 south of Wybong Road to the operator of Bengalla Mine (or its nominee) at rural market value; and</li><li>d) release the easements for pipeline and rail spur within or in the vicinity of ML 1645 south of Wybong Road which benefit land owned by MACH Energy.</li></ul></li></ul> <p><i>Note: The obligations under this commitment are not subject to the grant of development consent or any other approvals or access arrangements for alternative coal transport infrastructure for the Development and must be satisfied irrespective of the existence of any such approvals or infrastructure.</i></p>	EMM general audit team	Water management plan. Sighted letter dated 28 October from MACH to DPE confirming removal of all infrastructure within ML 1645. With the exception of the bridge in agreement Bengalla. Sighted letter dated 28 October from MACH to DPE confirming part transfer of ML 1645 to Bengalla on 23 December 2020. Sighted letter dated 28 October from MACH to DPE confirming land transfer completed 6 December 2019. Sighted letter dated 28 October from MACH to DPE confirming release of required easements to Bengalla/ Sighted letter dated 28 October from MACH to DPE confirming in consultation with DPE and Bengalla the demolition of the bridge would not be required till the realignment of Bengalla Link road is completed by Bengalla.	Sighted all rail corridor all infrastructure removed during site inspection. Noting bridge remains in consult with Bengalla, MSC and DPE. Sighted evidence of correspondence satisfying condition.	Compliant	
Flooding	<ul style="list-style-type: none"><li>• MACH Energy will design the MOD 4 rail infrastructure (including associated hydraulic structures) to meet the following criteria for potential flooding impacts for a 1% Annual Exceedance Probability flood event:<ul style="list-style-type: none"><li>o no more than 0.1 m increase in flood levels on any privately-owned land;</li><li>o no more than 0.01 m increase in flood levels at any privately-owned dwellings or commercial spaces;</li><li>o no more than 0.01 m increase in flood levels at any public roads servicing privately-owned properties; and</li><li>o no more than 0.1 metres per second (m/s) increase in flood velocities at privately-owned dwellings or commercial spaces.</li></ul></li></ul>	EMM general audit team	Sighted correspondence from DPE satisfying condition.	Sighted letter from DPE dated 8 Aug 2020 confirming documentation provided to DPE satisfies condition.	Compliant	
Rail Noise	<ul style="list-style-type: none"><li>• MACH Energy will document in the Mount Pleasant Operation Noise Management Plan reasonable and feasible measures that can be undertaken to minimise rail brake squeal associated with the MOD 4 rail infrastructure.</li><li>• The MOD 4 rail infrastructure will be subject to best practice detailed design, including consideration of brake squeal and bunching potential.</li><li>• MACH Energy will work with rail freight providers and a noise specialist during the final commissioning of the MOD 4 rail infrastructure to undertake trials and implement operational noise controls. This may include, for example, optimising train speed to reduce observed excessive noise.</li><li>• In the event of recurring rail noise complaints, MACH Energy will consult with rail freight providers to investigate the cause of the noise and investigate reasonable and feasible mitigation options to address the issue. This may include, for example, further varying rail speeds, driver behaviour or stock maintenance. MACH Energy will consider the outcomes of any such investigation in the renewal or extension of Mount Pleasant Operation rail freight contracts.</li></ul>	Bridges Acoustics	Noise management plan	Section 8.1 of the Noise Management Plan states the relocated rail spur will be designed and constructed considering the potential for wheel and brake squeal. Section 8.2 of the Noise Management Plan commits to additional investigation and mitigation measures if significant wheel and brake squeal occurs. A review of the complaints register during the audit period indicated no complaints were received regarding rail or train noise.	Compliant	
Redundant Infrastructure Removal in Bengalla Mine Footprint	<ul style="list-style-type: none"><li>• MACH Energy will stabilise redundant rail infrastructure areas within the footprint of the Bengalla Mine such that they do not pose an ongoing material source of dust emissions (i.e. seeding to establish a cover crop and/or application of a dust suppressant) prior to management of these areas being transferred to Bengalla Mine.</li><li>• Existing Mount Pleasant Operation rail spur erosion and sediment control water management structures (e.g. sediment fences) within the footprint of Bengalla Mine will also be left in place, subject to agreement of Bengalla Mine.</li></ul>	EMM Air quality team	a) Sighted letter dated 28 October from MACH to DPE confirming removal of all infrastructure within ML 1645. With the exception of the bridge in agreement Bengalla. b) Sighted letter dated 28 October from MACH to DPE confirming part transfer of ML 1645 to Bengalla on 23 December 2020. c) Sighted letter dated 28 October from MACH to DPE confirming land transfer completed 6 December 2019. d) Sighted letter dated 28 October from MACH to DPE confirming release of required easements to Bengalla/ e) Sighted letter dated 28 October from MACH to DPE confirming in consultation with DPE and Bengalla the demolition of the bridge would not be required till the realignment of Bengalla Link road is completed by Bengalla.	Sighted all rail corridor all infrastructure removed during site inspection. Noting bridge remains in consult with Bengalla, MSC and DPE. Sighted evidence of correspondence satisfying condition.	Compliant	

Visual Vegetation Screens	<ul style="list-style-type: none"><li>• MACH Energy will inspect the condition of the vegetation visual screens described in the Visual Impact Management Plan on a quarterly basis, and maintain these vegetation visual screens to the satisfaction of the Secretary.</li></ul>	EMM general audit team	Visual Impact Management Plan Site inspection. Inspection records.	Evidence of visual vegetation screen inspections. Areas inspected once per month.	Compliant	
Construction Traffic	<ul style="list-style-type: none"><li>• MACH Energy will develop a Construction Traffic Management Plan for the MOD 4 construction works in consultation with Council and to the satisfaction of the Secretary.</li></ul>	EMM general audit team	Appendix A of the Construction Environmental Management Plan for the MOD 4. Secretary approval.	The CTMP can be found in Appendix A of the CEMP prepared for the MOD 4 project. Secretary approval of the CEMP was received on 10 March 2020. Council were consulted with during the development of the CEMP.	Compliant	
Management of Historic Heritage Items	<ul style="list-style-type: none"><li>• MACH Energy will implement historic heritage management associated with MOD 4 in consultation with Council and a copy of any resulting reports/documentation will be provided to Council for its records.</li><li>• MACH Energy will consult with Council on the content of the photographic record of Overton Orchard and Race Track.</li><li>• MACH Energy will limit movement of vehicles/machinery in the area of the Overton Orchard and Race Track to avoid potential damage outside of the MOD 4 disturbance footprint, in consultation with Council. This includes avoiding disturbance of the areas shown in blue on Figure 6 of the Statement of Heritage Impact (Extent, 2007) included as Appendix F of EA (MOD 4).</li><li>• MACH Energy will consult with Council on potential points of access and routes for heavy vehicles and machinery at the Blunt’s Butter Factory. Points of access and routes will be demarcated and MACH Energy will ensure heavy vehicles remain within the demarcated areas.</li><li>• MACH Energy will consult with Council regarding appropriate demarcation to restrict movement of heavy vehicles near the two cuttings located east of Overton Orchard. If artefacts are exposed at the base of the well at MP13, works will cease until an archaeologist advises whether or not they constitute ‘relics’ under the NSW <i>Heritage Act 1977</i> and whether works should proceed pursuant to an application for an ‘exception’, or an excavation permit.</li></ul>	EMM general audit team	Construction Environmental Management Plan for MOD 4 (Appendix B).	CEMP prepared in consultation with Council. CEMP includes discussion with Council regarding Overton Orchard and Race Track. Appendix B of the CEMP details the Historic Heritage Management Plan.	Compliant	

Table A.3 - EPL 20850

Action	Requirement	Audit team responsible for condition	Evidence collected	Independent Audit Findings and Recommendations	Compliance status	Unique Identification Non-compliance																
1 - Administrative Conditions																						
A1 - What the licence authorises and regulates																						
A1.1	<div>This licence authorises the carrying out of the scheduled activities listed below at the premises specified in A2. The activities are listed according to their scheduled activity classification, fee-based activity classification and the scale of the operation. Unless otherwise further restricted by a condition of this licence, the scale at which the activity is carried out must not exceed the maximum scale specified in this condition.</div> <table><tr><th>Scheduled Activity</th><th>Fee Based Activity</th><th>Scale</th></tr><tr><td>Coal works</td><td>Coal works</td><td>&gt; 5000000 T annual handing capacity</td></tr><tr><td>Mining for coal</td><td>Mining for coal</td><td>&gt; 5000000 T annual production capacity</td></tr></table>	Scheduled Activity	Fee Based Activity	Scale	Coal works	Coal works	> 5000000 T annual handing capacity	Mining for coal	Mining for coal	> 5000000 T annual production capacity	EMM general audit team	Annual Reviews for 2020, 2021 and 2022. Annual Returns for 2020, 2021 and 2022.	<div>The annual reviews for the audit period indicate the following volumes of ROM coal was produced: 2020: 8.54 Mt 2021: 10.07 Mt 2022: 9.99 Mt</div> <div>This was below the capacity outlined in the EPL.</div>	Compliant								
Scheduled Activity	Fee Based Activity	Scale																				
Coal works	Coal works	> 5000000 T annual handing capacity																				
Mining for coal	Mining for coal	> 5000000 T annual production capacity																				
A2 - Premises or plant to which this licence applies																						
A2.1	<div>The licence applies to the following premises:</div> <table><tr><th>Premises Details</th></tr><tr><td>MOUNT PLEASANT OPERATION</td></tr><tr><td>1100 WYBONG ROAD</td></tr><tr><td>MUSWELLBROOK</td></tr><tr><td>NSW 2333</td></tr><tr><td> </td></tr><tr><td>AREA IDENTIFIED AS "MOUNT PLEASANT EPL 20850 (2021-9)" ON PLAN TITLED "MACH ENERGY AUSTRALIA MOUNT PLEASANT OPERATION ENVIRONMENT PROTECTION LICENCE PREMISES MAP" DATED 25/11/2021, PDF REF: MACH EPL - 9 211126.PDF</td></tr><tr><td>EPA DOCUMENT REFERENCE: DOC21/1102190.</td></tr><tr><td>THIS LICENCE DOES NOT APPLY TO, OR INCLUDE PUBLIC ROADS.</td></tr></table>	Premises Details	MOUNT PLEASANT OPERATION	1100 WYBONG ROAD	MUSWELLBROOK	NSW 2333		AREA IDENTIFIED AS "MOUNT PLEASANT EPL 20850 (2021-9)" ON PLAN TITLED "MACH ENERGY AUSTRALIA MOUNT PLEASANT OPERATION ENVIRONMENT PROTECTION LICENCE PREMISES MAP" DATED 25/11/2021, PDF REF: MACH EPL - 9 211126.PDF	EPA DOCUMENT REFERENCE: DOC21/1102190.	THIS LICENCE DOES NOT APPLY TO, OR INCLUDE PUBLIC ROADS.	EMM general audit team	EPL 20850	EMM confirmed the EPL relates to the MPO site.	Compliant								
Premises Details																						
MOUNT PLEASANT OPERATION																						
1100 WYBONG ROAD																						
MUSWELLBROOK																						
NSW 2333																						
AREA IDENTIFIED AS "MOUNT PLEASANT EPL 20850 (2021-9)" ON PLAN TITLED "MACH ENERGY AUSTRALIA MOUNT PLEASANT OPERATION ENVIRONMENT PROTECTION LICENCE PREMISES MAP" DATED 25/11/2021, PDF REF: MACH EPL - 9 211126.PDF																						
EPA DOCUMENT REFERENCE: DOC21/1102190.																						
THIS LICENCE DOES NOT APPLY TO, OR INCLUDE PUBLIC ROADS.																						
A3 - Other activities																						
A3.1	<div>This licence applies to all other activities carried on at the premises, including:</div> <table><tr><th>Ancillary Activity</th></tr><tr><td>Coal Works</td></tr><tr><td>Land-based extractive activity</td></tr><tr><td>sewage treatment plant</td></tr></table>	Ancillary Activity	Coal Works	Land-based extractive activity	sewage treatment plant	EMM general audit team	Site inspection	Coal works, land-based extractive activities and operation of the sewage treatment plant were all noted during the site inspection. No further works demonstrated during site inspection.	Compliant													
Ancillary Activity																						
Coal Works																						
Land-based extractive activity																						
sewage treatment plant																						
A4 - Information supplied to the EPA																						
A4.1	<div>Works and activities must be carried out in accordance with the proposal contained in the licence application, except as expressly provided by a condition of this licence. In this condition the reference to "the licence application" includes a reference to: a) the applications for any licences (including former pollution control approvals) which this licence replaces under the Protection of the Environment Operations (Savings and Transitional) Regulation 1998; and b) the licence information form provided by the licensee to the EPA to assist the EPA in connection with the issuing of this licence.</div>	EMM general audit team	Site inspection. Annual Returns for 2020, 2021 and 2022.	EMM deem that MPO are compliant with this condition.	Compliant																	
2 - Discharges to Air and Water and Applications to Land																						
P1 - Location of monitoring/discharge points and areas																						
P1.1	<div>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.</div> <table><tr><th colspan="4">Air</th></tr><tr><th>EPA Identification no.</th><th>Type of Monitoring Point</th><th>Type of Discharge Point</th><th>Location Description</th></tr><tr><td>1</td><td>Particulate Matter Monitoring (PM10)</td><td></td><td>Continuous particulate monitor located to the south-east of the premises, at MGA56 299558 6428748 shown as "A-PF2" on plan titled "Environment Protection Licence Premises Map" at EPA Reference: DOC21/1102190.</td></tr><tr><td>2</td><td>Particulate Matter Monitoring (PM10)</td><td></td><td>Continuous particulate monitor located to the north of the premises, at coordinates MGA56 295811 6434686 shown as "A-PF5" on plan titled "Environment Protection Licence Premises Map" at EPA Reference: DOC21/1102190.</td></tr></table>	Air				EPA Identification no.	Type of Monitoring Point	Type of Discharge Point	Location Description	1	Particulate Matter Monitoring (PM10)		Continuous particulate monitor located to the south-east of the premises, at MGA56 299558 6428748 shown as "A-PF2" on plan titled "Environment Protection Licence Premises Map" at EPA Reference: DOC21/1102190.	2	Particulate Matter Monitoring (PM10)		Continuous particulate monitor located to the north of the premises, at coordinates MGA56 295811 6434686 shown as "A-PF5" on plan titled "Environment Protection Licence Premises Map" at EPA Reference: DOC21/1102190.	EMM Air quality team	Air quality monitoring sites (A-PF22 and A-PF5) are included on Figure 5 of the Air Quality Management Plan. Monitoring data provided in Excel sheets. Annual Reviews for 2020, 2021 and 2022. Environment Protection Licence Premises Map.	Both monitoring points 1 and 2 shown on the Environment Protection Licence Premises Map and in the AQGHGMP.	Compliant	
Air																						
EPA Identification no.	Type of Monitoring Point	Type of Discharge Point	Location Description																			
1	Particulate Matter Monitoring (PM10)		Continuous particulate monitor located to the south-east of the premises, at MGA56 299558 6428748 shown as "A-PF2" on plan titled "Environment Protection Licence Premises Map" at EPA Reference: DOC21/1102190.																			
2	Particulate Matter Monitoring (PM10)		Continuous particulate monitor located to the north of the premises, at coordinates MGA56 295811 6434686 shown as "A-PF5" on plan titled "Environment Protection Licence Premises Map" at EPA Reference: DOC21/1102190.																			
P1.2	<div>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.</div> <table><tr><th colspan="4">Water and land</th></tr><tr><th>EPA Identification no.</th><th>Type of Monitoring Point</th><th>Type of Discharge Point</th><th>Location Description</th></tr><tr><td>14</td><td>Effluent quality monitoring; Discharge to mine water system</td><td>Effluent quality monitoring; Discharge to mine water system</td><td>Monitoring of effluent discharge quality from CHPP STP at MGA56 293641 6428993 shown as "CHPP-STP" on plan titled "Environment Protection Licence Premises Map" at EPA Reference: DOC21/1102190.</td></tr><tr><td>15</td><td>Effluent quality monitoring; Discharge to mine water system</td><td>Effluent quality monitoring; Discharge to mine water system</td><td>Monitoring of effluent discharge quality from MIA STP at MGA56 294163 6428420, shown as "MIA-STP" on plan titled "Environment Protection Licence Premises Map" at EPA Reference: DOC21/1102190.</td></tr></table>	Water and land				EPA Identification no.	Type of Monitoring Point	Type of Discharge Point	Location Description	14	Effluent quality monitoring; Discharge to mine water system	Effluent quality monitoring; Discharge to mine water system	Monitoring of effluent discharge quality from CHPP STP at MGA56 293641 6428993 shown as "CHPP-STP" on plan titled "Environment Protection Licence Premises Map" at EPA Reference: DOC21/1102190.	15	Effluent quality monitoring; Discharge to mine water system	Effluent quality monitoring; Discharge to mine water system	Monitoring of effluent discharge quality from MIA STP at MGA56 294163 6428420, shown as "MIA-STP" on plan titled "Environment Protection Licence Premises Map" at EPA Reference: DOC21/1102190.	EMM general audit team	Environment Protection Licence Premises Map. Water management plan.	<div>No effluent was discharged during the audit period. Effluent is removed from site by a suitably qualified contractor. Any treated effluent released from the MWD to the Hunter River via the HRSTS is compliant EPL 20850.</div> <div>Recommendation (REC 12) : Show EPL Point 14 and 15 on a figure in Water Management Plan.</div>	Compliant	
Water and land																						
EPA Identification no.	Type of Monitoring Point	Type of Discharge Point	Location Description																			
14	Effluent quality monitoring; Discharge to mine water system	Effluent quality monitoring; Discharge to mine water system	Monitoring of effluent discharge quality from CHPP STP at MGA56 293641 6428993 shown as "CHPP-STP" on plan titled "Environment Protection Licence Premises Map" at EPA Reference: DOC21/1102190.																			
15	Effluent quality monitoring; Discharge to mine water system	Effluent quality monitoring; Discharge to mine water system	Monitoring of effluent discharge quality from MIA STP at MGA56 294163 6428420, shown as "MIA-STP" on plan titled "Environment Protection Licence Premises Map" at EPA Reference: DOC21/1102190.																			

P1.3	<div>The following points referred to in the table below are identified in this licence for the purposes of weather and/or noise monitoring and/or setting limits for the emission of noise from the premises.</div> <div>Noise/Weather<table><tr><th>EPA Identification no.</th><th>Type of monitoring point</th><th>Location description</th></tr><tr><td>3</td><td>Air blast overpressure &amp; ground vibration peak particle velocity monitoring</td><td>Blast monitor located to the south-west of the premises, at MGA56 296265 6430737, shown as "B-VOC" on plan titled "Environment Protection Licence Premises Map" at EPA Reference: DOC21/1102190.</td></tr><tr><td>4</td><td>Meteorological Station</td><td>Meteorological monitoring located at MGA56 299023 6433749, shown as "M-WS4" on plan titled "Environment Protection Licence Premises Map" at EPA Reference: DOC21/1102190.</td></tr><tr><td>5</td><td>Noise monitoring</td><td>Attended noise monitoring at MGA56 291465, 6427182, shown as "N-AT1" on plan titled "Environment Protection Licence Premises Map" at EPA Reference: DOC21/1102190.</td></tr><tr><td>6</td><td>Noise monitoring</td><td>Attended noise monitoring at MGA56 290608 6434490, shown as "N-AT2" on plan titled "Environment Protection Licence Premises Map" at EPA Reference: DOC21/1102190. Representative of dwellings to the north-west of the premises.</td></tr><tr><td>7</td><td>Noise monitoring</td><td>Attended noise monitoring at MGA56 300725 6432946, shown as "N-AT3" on plan titled "Environment Protection Licence Premises Map" at EPA Reference: DOC21/1102190. Representative of NAG 5.</td></tr><tr><td>8</td><td>Noise monitoring</td><td>Attended noise monitoring at MGA56 299947 6429264, shown as "N-AT4" on plan titled "Environment Protection Licence Premises Map" at EPA Reference: DOC21/1102190. Representative of NAG 6 &amp; 7.</td></tr><tr><td>9</td><td>Noise monitoring</td><td>Attended noise monitoring at MGA56 299161 6427503, shown as "N-AT5" on plan titled "Environment Protection Licence Premises Map" at EPA Reference: DOC21/1102190. Representative of NAG 8 &amp; 9.</td></tr><tr><td>10</td><td>Noise monitoring</td><td>Attended noise monitoring at MGA56 289092 6423155, shown as "N-AT6" on plan titled "Environment Protection Licence Premises Map" at EPA Reference: DOC21/1102190. Representative of NAG 11.</td></tr><tr><td>11</td><td>Meteorological Station</td><td>Meteorological monitoring located at MGA56 299558 6428748, shown as "M-WM2" on plan titled "Environment Protection Licence Premises Map" at EPA Reference: DOC21/1102190.</td></tr><tr><td>12</td><td>Air blast overpressure &amp; ground vibration peak particle velocity monitoring</td><td>Blast monitor located to the south-west of the premises, at MGA56 294752 6428059, shown as "B-VQA" on plan titled "Environment Protection Licence Premises Map" at EPA Reference: DOC21/1102190.</td></tr><tr><td>13</td><td>Air blast overpressure &amp; ground vibration peak particle velocity monitoring</td><td>Blast monitor located to the south-west of the premises, at MGA56 300036 6428691, shown as "B-VQ2" on plan titled "Environment Protection Licence Premises Map" at EPA Reference: DOC21/1102190.</td></tr></table></div> <div>Bridges Acoustics</div> <div>Noise management plan Blast management plan Noise and blast monitoring data Environment Protection Licence Premises Map</div> <div>The Noise Management Plan and all noise monitoring reports include monitoring points 5 to 10. The Blast Management Plan and all supplied blast data include monitoring points 3, 12 and 13.</div> <div>Compliant</div>	EPA Identification no.	Type of monitoring point	Location description	3	Air blast overpressure & ground vibration peak particle velocity monitoring	Blast monitor located to the south-west of the premises, at MGA56 296265 6430737, shown as "B-VOC" on plan titled "Environment Protection Licence Premises Map" at EPA Reference: DOC21/1102190.	4	Meteorological Station	Meteorological monitoring located at MGA56 299023 6433749, shown as "M-WS4" on plan titled "Environment Protection Licence Premises Map" at EPA Reference: DOC21/1102190.	5	Noise monitoring	Attended noise monitoring at MGA56 291465, 6427182, shown as "N-AT1" on plan titled "Environment Protection Licence Premises Map" at EPA Reference: DOC21/1102190.	6	Noise monitoring	Attended noise monitoring at MGA56 290608 6434490, shown as "N-AT2" on plan titled "Environment Protection Licence Premises Map" at EPA Reference: DOC21/1102190. Representative of dwellings to the north-west of the premises.	7	Noise monitoring	Attended noise monitoring at MGA56 300725 6432946, shown as "N-AT3" on plan titled "Environment Protection Licence Premises Map" at EPA Reference: DOC21/1102190. Representative of NAG 5.	8	Noise monitoring	Attended noise monitoring at MGA56 299947 6429264, shown as "N-AT4" on plan titled "Environment Protection Licence Premises Map" at EPA Reference: DOC21/1102190. Representative of NAG 6 & 7.	9	Noise monitoring	Attended noise monitoring at MGA56 299161 6427503, shown as "N-AT5" on plan titled "Environment Protection Licence Premises Map" at EPA Reference: DOC21/1102190. Representative of NAG 8 & 9.	10	Noise monitoring	Attended noise monitoring at MGA56 289092 6423155, shown as "N-AT6" on plan titled "Environment Protection Licence Premises Map" at EPA Reference: DOC21/1102190. Representative of NAG 11.	11	Meteorological Station	Meteorological monitoring located at MGA56 299558 6428748, shown as "M-WM2" on plan titled "Environment Protection Licence Premises Map" at EPA Reference: DOC21/1102190.	12	Air blast overpressure & ground vibration peak particle velocity monitoring	Blast monitor located to the south-west of the premises, at MGA56 294752 6428059, shown as "B-VQA" on plan titled "Environment Protection Licence Premises Map" at EPA Reference: DOC21/1102190.	13	Air blast overpressure & ground vibration peak particle velocity monitoring	Blast monitor located to the south-west of the premises, at MGA56 300036 6428691, shown as "B-VQ2" on plan titled "Environment Protection Licence Premises Map" at EPA Reference: DOC21/1102190.
EPA Identification no.	Type of monitoring point	Location description																																			
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9	Noise monitoring	Attended noise monitoring at MGA56 299161 6427503, shown as "N-AT5" on plan titled "Environment Protection Licence Premises Map" at EPA Reference: DOC21/1102190. Representative of NAG 8 & 9.																																			
10	Noise monitoring	Attended noise monitoring at MGA56 289092 6423155, shown as "N-AT6" on plan titled "Environment Protection Licence Premises Map" at EPA Reference: DOC21/1102190. Representative of NAG 11.																																			
11	Meteorological Station	Meteorological monitoring located at MGA56 299558 6428748, shown as "M-WM2" on plan titled "Environment Protection Licence Premises Map" at EPA Reference: DOC21/1102190.																																			
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13	Air blast overpressure & ground vibration peak particle velocity monitoring	Blast monitor located to the south-west of the premises, at MGA56 300036 6428691, shown as "B-VQ2" on plan titled "Environment Protection Licence Premises Map" at EPA Reference: DOC21/1102190.																																			
P1.4	For the purpose of Condition P1.3, NAG refers to the Noise Assessment Groups shown in Figure 5-3 of Appendix 5 of DA 92/97 (MOD 4) dated 16 November 2018 (EPA reference DOC19/1010437).	Bridges Acoustics		Noted	Not triggered																																
3 - Limit Conditions																																					
L1 - Pollution of waters																																					
L1.1	Except as may be expressly provided in any other condition of this licence, the licensee must comply with section 120 of the <i>Protection of the Environment Operations Act 1997</i> .	EMM general audit team	Annual Reviews for 2020, 2021 and 2022. Letters to/from agencies reporting the events. Water management plan.	Seven water discharge events occurred during the audit period following periods of heavy rain. These occurred on: * 8 March 2021 - failure of erosion and sediment controls resulted in run off leaving site. * 8 June 2021 - two separate discharges of sediment-laden water from MOD 4 construction area and into Wybong Road swale drains, where it ceased. * 12 November 2021 - discharge of sediment-laden water from the Rail 2 Project Area and into Wybong Road swale drains. * 8 December 2021 - discharge from four sediment basins (SD4, SD6, SD7 and ED2) offsite. * 9 December 2021 - discharge from four sediment basins (SD4, SD6, SD7 and ED2) offsite. * 8 March 2022 - discharge from five sediment basins (SD1, SD4, SD6, SD7 and TSB2) offsite. * 21 October 2022 - spillway discharge was observed from SD4. Following the rainfall events, MPO completed investigations into the cause and reported the incidents to DPE and EPA. As required by the water management plan, water quality sampling was undertaken during the events, with water quality showing negligible changes in release water in pH, EC and TSS. Regular inspections of were implemented and undertaken prior to and during forecasted heavy rainfall events, in addition to regular third party inspections by a CPESC. MPO reviewed and updated the water management plan in accordance with Schedule 5, Condition 4. Elevated EC levels at surface water site W17 on three consecutive monitoring rounds notified on 11 June 2021 (Section 6.1.3 of 2021 Annual Review). EMM understand no further compliance action is proposed by DPE or the EPA in regards to the above matters, as such considers this condition compliant.	Compliant																																
L2 - Waste																																					
L2.1	<div>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.</div> <div>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.</div> <div>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.</div> <div>This condition does not limit any other conditions in this licence.</div> <table><tr><th>Code</th><th>Waste</th><th>Description</th><th>Activity</th><th>Other Limits</th></tr><tr><td>NA</td><td>Waste tyres</td><td>Disposal of used heavy mobile equipment tyres at approved on-site locations.</td><td>Waste disposal (application to land)</td><td>50 tonnes of used tyres stored per dump location.</td></tr></table>	Code	Waste	Description	Activity	Other Limits	NA	Waste tyres	Disposal of used heavy mobile equipment tyres at approved on-site locations.	Waste disposal (application to land)	50 tonnes of used tyres stored per dump location.	EMM general audit team	Annual Reviews for 2020, 2021 and 2022. Annual Returns for 2020, 2021 and 2022.	<div>2020 Annual Review states no waste tyres buried on site.</div> <div>2021 Annual Review states a waste tyre in-pit burial campaign was undertaken in Jan 2021 and Oct 2021: - 40 tyres disposed of in Pit B - 55 tyres disposed of in Pit D - 39 tyres utilised around on-site laydown areas.</div> <div>2022 Annual Review states a waste tyre in-pit burial campaign was undertaken in March 2022 with the majority of the tyres disposed of in Pit B. All waste tyres were disposed in accordance with Condition O6 of EPL 20850.</div> <div>All waste tyres were disposed in accordance with EPL 20850.</div>	Compliant																						
Code	Waste	Description	Activity	Other Limits																																	
NA	Waste tyres	Disposal of used heavy mobile equipment tyres at approved on-site locations.	Waste disposal (application to land)	50 tonnes of used tyres stored per dump location.																																	
L3 - Noise limits																																					

L3.1	<p>Noise generated at the premises must not exceed the noise limits presented in the table below.</p> <p>Note: The noise limits in the table below do not apply if the licensee has a written agreement with the relevant landowner to exceed the noise limit and the licensee has advised the EPA in writing of the terms of the agreement. The noise limits in the table below do not apply to residences owned by the licensee or those residences that are subject to acquisition as listed in Table 1 of Schedule 3 of Development Consent DA 92/97 (MOD 4), dated 16 November 2018. Residences referenced in this table are from Table 3 of Schedule 3 of Development Consent DA92/97 (MOD 4), dated 16 November 2018 (EPA reference DOC19/1010437).</p> <table><tr><th>Location</th><th>Day - LAeq(15 minute)</th><th>Evening - LAeq(15 minute)</th><th>Night - LAeq(15 minute)</th><th>Night - LA1(1 minute)</th></tr><tr><td>EPA Point 5</td><td>43</td><td>43</td><td>43</td><td>45</td></tr><tr><td>EPA Point 6</td><td>36</td><td>36</td><td>36</td><td>45</td></tr><tr><td>EPA Point 7</td><td>41</td><td>41</td><td>41</td><td>45</td></tr><tr><td>EPA Point 8</td><td>43</td><td>42</td><td>42</td><td>45</td></tr><tr><td>EPA Point 9</td><td>40</td><td>40</td><td>40</td><td>45</td></tr><tr><td>EPA Point 10</td><td>35</td><td>35</td><td>35</td><td>45</td></tr><tr><td>Residence 68 &amp; 74</td><td>43</td><td>42</td><td>42</td><td>45</td></tr><tr><td>Residence 86a</td><td>42</td><td>42</td><td>42</td><td>45</td></tr><tr><td>Residence 35, 35b &amp; 77</td><td>42</td><td>41</td><td>41</td><td>45</td></tr><tr><td>Residence 79, 80a, 140c &amp; 526</td><td>41</td><td>41</td><td>41</td><td>45</td></tr><tr><td>Residence 289</td><td>41</td><td>40</td><td>40</td><td>45</td></tr><tr><td>Residence 84a, 139, 154, 203, 257 &amp; 258a</td><td>40</td><td>40</td><td>40</td><td>45</td></tr><tr><td>Residence 83</td><td>40</td><td>39</td><td>39</td><td>45</td></tr><tr><td>Residence 86b, 140a, 202 &amp; 259</td><td>39</td><td>39</td><td>39</td><td>45</td></tr><tr><td>Residence 198 &amp; 202b</td><td>38</td><td>38</td><td>38</td><td>45</td></tr><tr><td>Residence 260 &amp; 261</td><td>37</td><td>37</td><td>37</td><td>45</td></tr><tr><td>Residence 169 &amp; 272</td><td>36</td><td>36</td><td>36</td><td>45</td></tr><tr><td>NAG 5 - All other privately-owned land</td><td>41</td><td>40</td><td>39</td><td>45</td></tr><tr><td>NAG 6 - All other privately-owned land</td><td>37</td><td>37</td><td>37</td><td>45</td></tr><tr><td>NAG 7 - All other privately-owned land</td><td>40</td><td>37</td><td>37</td><td>45</td></tr><tr><td>NAG 8 - All other privately-owned land</td><td>41</td><td>39</td><td>39</td><td>45</td></tr><tr><td>NAG 9 - All other privately-owned land</td><td>39</td><td>38</td><td>37</td><td>45</td></tr><tr><td>NAG 11 - All other privately-owned land</td><td>37</td><td>36</td><td>35</td><td>45</td></tr><tr><td>All other privately-owned land</td><td>35</td><td>35</td><td>35</td><td>45</td></tr></table>	Location	Day - LAeq(15 minute)	Evening - LAeq(15 minute)	Night - LAeq(15 minute)	Night - LA1(1 minute)	EPA Point 5	43	43	43	45	EPA Point 6	36	36	36	45	EPA Point 7	41	41	41	45	EPA Point 8	43	42	42	45	EPA Point 9	40	40	40	45	EPA Point 10	35	35	35	45	Residence 68 & 74	43	42	42	45	Residence 86a	42	42	42	45	Residence 35, 35b & 77	42	41	41	45	Residence 79, 80a, 140c & 526	41	41	41	45	Residence 289	41	40	40	45	Residence 84a, 139, 154, 203, 257 & 258a	40	40	40	45	Residence 83	40	39	39	45	Residence 86b, 140a, 202 & 259	39	39	39	45	Residence 198 & 202b	38	38	38	45	Residence 260 & 261	37	37	37	45	Residence 169 & 272	36	36	36	45	NAG 5 - All other privately-owned land	41	40	39	45	NAG 6 - All other privately-owned land	37	37	37	45	NAG 7 - All other privately-owned land	40	37	37	45	NAG 8 - All other privately-owned land	41	39	39	45	NAG 9 - All other privately-owned land	39	38	37	45	NAG 11 - All other privately-owned land	37	36	35	45	All other privately-owned land	35	35	35	45	Bridges Acoustics	19/11/21 - DPE warning letter - Sustained exceedance (measurements at 00:18 and 00:54) of the LA1(1 minute) criterion at monitoring location N-AT4 . Consultants monitoring reports Monthly monitoring reports Annual Reviews for 2020, 2021 and 2022.	Review of consultant's noise monitoring reports indicates: ( <b>non-compliant in bold</b> , other comments non-bold) <b>- April 2020 - Exceedance of the LA1,1min criterion at N-AT4</b> <b>- July 2020 - Exceedance of the LAeq,15min and LA1,1min criteria at N-AT3</b> - July 2021 - Exceedance of the LA1,1min criterion at N-AT3, although the follow-up measurement showed compliance <b>- August 2021 - Exceedance of the LA1,1min criterion at N-AT4</b> <b>- November 2022 - Exceedance of the LA1,1min criterion at N-AT4.</b> Exceedance of the LA1,1min criterion at N-AT5, although the follow-up measurement showed compliance.  Non-compliance as per 2022 Annual Return - Exceedance of EPA Point 8 (ID 8) LA (1 minute) and EPA Point 9 (ID 9) LA1 (1 minute) noise limit of 45dB during operator attended noise monitoring.  <b>Recommendation (REC 13):</b> Implement diligent noise management practises to avoid exceedances of the noise criteria.	Non-compliant	NC7
Location	Day - LAeq(15 minute)	Evening - LAeq(15 minute)	Night - LAeq(15 minute)	Night - LA1(1 minute)																																																																																																																															
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L3.2	For the purposes of the noise limits in this licence: a) Day is defined as the period from 7 am to 6 pm Monday to Saturday, and 8 am to 6 pm Sundays and Public Holidays, b) Evening is defined as the period from 6 pm to 10 pm, and c) Night is defined as the period from 10 pm to 7 am Monday to Saturday, and 10 pm to 8 am Sundays and Public Holidays.	Bridges Acoustics	N/A	Noted	Not triggered																																																																																																																														
L3.3	The noise limits set out in this licence apply under all meteorological conditions except for the following: a) Wind speeds greater than 3 metres/second at 10 metres above ground level; or b) Stability category F temperature inversion conditions and wind speeds greater than 2 metres/second at 10 metres above ground level; or c) Stability category G temperature inversion conditions.	Bridges Acoustics	Noise Management Plan Noise monitoring reports	Sections 8.5 and 9.2.4 of the Noise Management Plan acknowledge the meteorological conditions specified in this condition. Noise monitoring reports include weather conditions at the time of each noise measurement and exclude noise measurement data collected under invalid conditions as specified in this condition.	Compliant																																																																																																																														
L3.4	For the purposes of condition L3.3: a) Data recorded by the closest and most representative meteorological station installed on the premises at EPA Identification Point 4 or 11 must be used to determine the meteorological conditions; and b) Temperature inversion conditions (stability category) are to be determined using the sigma-theta method described in Appendix E of the Industrial Noise Policy (EPA 2000).	Bridges Acoustics	Noise Management Plan Noise monitoring reports	Noise monitoring reports state meteorological data are obtained from the MPO automatic weather station (AWS). Site personnel advise weather data from the southern M-WM2 weather station are usually provided, which is the most appropriate for the majority of noise monitoring locations.  Section 8.5 of the Noise Management Plan states inversions are estimated according to the sigma-theta method. Noise monitoring reports state the stability category is determined by this method.	Compliant																																																																																																																														
L4 - Blasting																																																																																																																																			
L4.1	Blasting in or on the premises must only be carried out between 0900 hours and 1700 hours, Monday to Saturday. Blasting in or on the premises must not take place on Sundays or Public Holidays without the prior approval of the EPA.	Bridges Acoustics	Blast data Annual Returns for 2020, 2021 and 2022.	A detailed review of raw blasting data indicate two blast events outside these hours, however these were confirmed by site personnel to be false trigger events. All blast events complied with this condition.	Compliant																																																																																																																														
L4.2	The airblast overpressure level from blasting operations in or on the premises must not exceed 115 dB (Lin Peak) for more than 5% of the total number of blasts during each reporting period at any blast monitoring location specified in this licence.	Bridges Acoustics	Blast data Annual Returns for 2020, 2021 and 2022.	A detailed review of blasting data indicates overpressure levels at all residential locations comply with this condition.	Compliant																																																																																																																														
L4.3	The airblast overpressure level from blasting operations in or on the premises must not exceed 120 dB (Lin Peak) at any time at any blast monitoring location specified in this licence.	Bridges Acoustics	Blast data Annual Returns for 2020, 2021 and 2022.	A detailed review of blasting data indicates overpressure levels at all <u>residential</u> locations comply with this condition. Non-compliance as per 2022 Annual Return - A production blast resulted in an overpressure reading in excess of 120dB(L registering at monitor B-VOA (EPA ID 12). Table 31 in the Annual Review notes no residences are located near this monitor and subsequent revision of the EPL has removed the requirement for a monitor at this location.  <b>Recommendation (REC 14):</b> Ensure the blast monitoring locations are regularly reviewed and represent closest privately owned receivers.	Non-compliant	NC8																																																																																																																													
L4.4	Ground vibration peak particle velocity from blasting operations in or on the premises must not exceed 5 mm/second for more than 5% of the total number of blasts during each reporting period at any blast monitoring location specified in this licence.	Bridges Acoustics	Blast data Annual Returns for 2020, 2021 and 2022.	A detailed review of blasting data indicates overpressure levels at all residential locations comply with this condition.	Compliant																																																																																																																														
L4.5	Ground vibration peak particle velocity from blasting operations in or on the premises must not exceed 10 mm/second at any time at any blast monitoring location specified in this licence.	Bridges Acoustics	Blast data Annual Returns for 2020, 2021 and 2022.	A detailed review of blasting data indicates overpressure levels at all residential locations comply with this condition.	Compliant																																																																																																																														



L4.6	<p>Offensive blast fume must not be emitted from the premises.</p> <p><i>Definition:</i>  <i>Offensive blast fume means post-blast gases from the detonation of explosives at the premises that by reason of their nature, duration, character or quality, or the time at which they are emitted, or any other circumstances:</i>  1. are harmful to (or likely to be harmful to) 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.</p>	EMM Air quality team	Annual Reviews for 2020, 2021 and 2022. 2020, 2021 and 2020 complaints logs.	<p><u>2020</u></p> <p>* A blast fume complaint was received on 15 June 2020.</p> <p>* MACH Energy investigated this and found that emissions were likely to have left the boundary. Measures were put in place.</p> <p><u>2021</u></p> <p>* The 2021 Annual Review report reported no blast fume events in the reporting period however the 2021 complaints log mentions two blast fume complaints on 30/03/2021 and 26/05/2021. These were investigated by MACH Energy.</p> <p>* The investigation of blasts on 30/03/2021 and 26/05/2021 found that the blast fume rating was zero and no post blast emissions left the EPL or DA boundary.</p> <p><u>2022</u></p> <p>* 2022 complaints log did not report any blast fume complaints in regard to AQ or odour.</p> <p><u>2023</u></p> <p>*No complaints for Jan, Feb, Mar 2023.</p> <p><b>Recommendation (REC 15):</b> Review measures in the Blast Management Plan and the AQGHGMP for effectiveness and ensure these are being implemented on site.</p>	Non-compliant	NC9
<b>L5 - Potentially offensive odour</b>						
L5.1	<p>No condition of this licence identifies a potentially offensive odour for the purposes of Section 129 of the <i>Protection of the Environment Operations Act 1997</i>.</p> <p><i>Note: Section 129 of the Protection of the Environment Operations Act 1997, provides that the licensee must not cause or permit the emission of any offensive odour from the premises but provides a defence if the emission is identified in the relevant environment protection licence as a potentially offensive odour and the odour was emitted in accordance with the conditions of a licence directed at minimising odour.</i></p>	EMM Air quality team	Annual Reviews for 2020, 2021 and 2022. 2020, 2021 and 2020 complaints logs.	<p>12 odour complaints received in the audit period:</p> <p>* 21/05/2020 - MACH Energy investigated and could not identify odour.</p> <p>* 05/08/2020 - MACH Energy investigated and found that smoke was coming from the Pit E RL185 dump and therefore a capping task was completed.</p> <p>* 27/04/2021 - MACH Energy investigated and could not identify odour or heated material.</p> <p>* 14/05/2021 - Meteorological data recorded and notes that a prescribed burn had taken place on the same day. Inconclusive.</p> <p>* 04/07/2021 - MACH Energy investigated and found a small amount of heated material present in Pit D.</p> <p>* 11/07/2021 - MACH Energy investigated and found a small amount of heated material on the pit dump in areas of Pit A, D, &amp; E. Capping was undertaken.</p> <p>* 15/08/2021 - MACH Energy investigated and found no areas of concern.</p> <p>* 15/08/2021 - MACH Energy investigated and found no heated materials in Pit C, D, R, F dumps.</p> <p>* 15/08/2021 - MACH Energy investigated and found no heated materials in Pit C, D, R, F dumps.</p> <p>* 15/07/2022 - MACH Energy investigated and found a small amount of smoke in the Northern Pit which did not reoccur the following day. Inspections were carried out on 15 and 16 July and odour was not detected.</p> <p>* 2022 Annual Review states that 3 odour complaints were made in 2022 and details the one above however, these are not identified as odour-related complaints in the 2022 complaints register (most likely spon com).</p> <p>Some MACH Energy responses imply that the odour complaints may have been due to heated materials. Heated materials = spon com.</p> <p><b>Recommendations:</b></p> <p>* <b>REC 2</b> - Complaints registers and annual reports should be consistent in stating odour complaints (e.g. 2022 Annual Report mentions 3 odour complaints but these are not listed as 'odour' in the 2022 complaints register but rather, refer to spontaneous combustion and the 'nature of complaint' is 'other').</p> <p>* <b>REC 16</b> - Use 'Consultation Manager' internal system to track all complaints and manage follow up.</p>	Non-compliant	NC10
<b>4 - Operating Conditions</b>						
<b>O1 - Activities must be carried out in a competent manner</b>						
O1.1	<p>Licensed activities must be carried out in a competent manner.</p> <p>This includes:</p> <p>a) the processing, handling, movement and storage of materials and substances used to carry out the activity; and</p> <p>b) the treatment, storage, processing, reprocessing, transport and disposal of waste generated by the activity.</p>	EMM general audit team	Site inspection.	<p>Non-compliant in the storage of materials and substances.</p> <p>The workshop area contained unbunded chemicals in storage areas.</p> <p>All waste was disposed of and stored in appropriately labelled bins.</p> <p><b>Recommendation (REC 8):</b> Ensure all chemicals/hydrocarbons are appropriately stored in banded areas.</p>	Non-compliant	NC11
<b>O2 - Maintenance of plant and equipment</b>						
O2.1	<p>All plant and equipment installed at the premises or used in connection with the licensed activity:</p> <p>a) must be maintained in a proper and efficient condition; and</p> <p>b) must be operated in a proper and efficient manner.</p>	EMM general audit team	<p>Sewage treatment plant weekly servicing reports (Booth Contracting).</p> <p>Sewage treatment plant monthly maintenance reports (Ozzi Kleen).</p> <p>Waste water treatment plant annual maintenance reports (Mak Water).</p> <p>Plant maintenance schedule.</p> <p>Thiess Plan Maintenance Procedure.</p>	<p>EMM reviewed the plant maintenance schedule. All new equipment coming to site is sound power level tested. Servicing is based on hours run/used.</p> <p>The sewage/waste water system has been serviced appropriately and therefore maintained in a proper and efficient condition.</p> <p>Thiess operate a Computerised Maintenance Management Systems (CMMS) to manage maintenance planning.</p>	Compliant	
O2.2	<p><b>Sewage Treatment System</b></p> <p>The sewage treatment system at the premises 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.</p>	EMM general audit team	<p>Sewage treatment plant weekly servicing reports (Booth Contracting).</p> <p>Sewage treatment plant monthly maintenance reports (Ozzi Kleen).</p> <p>Waste water treatment plant annual maintenance reports (Mak Water).</p>	The sewage treatment plant is serviced on a weekly and monthly basis. EMM reviewed evidence of servicing records and deem this condition compliant.	Compliant	
O2.3	The licensee must record each inspection and any actions required or recommended by the technician including date, time, and all results of tests performed on the sewage treatment system by the technician.	EMM general audit team	<p>Sewage treatment plant weekly servicing reports (Booth Contracting).</p> <p>Sewage treatment plant monthly maintenance reports (Ozzi Kleen).</p> <p>Waste water treatment plant annual maintenance reports (Mak Water).</p> <p>Plant maintenance schedule.</p>	<p>EMM reviewed the plant maintenance schedule. All new equipment coming to site is sound power level tested. Servicing is based on hours run/used.</p> <p>The sewage/waste water system has been serviced appropriately and therefore maintained in a proper and efficient condition.</p> <p>Thiess operate a Computerised Maintenance Management Systems (CMMS) to manage maintenance planning.</p>	Compliant	
<b>O3 - Dust</b>						
O3.1	The premises must be maintained in a condition which minimises or prevents the emission of dust from the premises.	EMM Air quality team	Complaints records.	<p>Management measures are detailed in the AQGHGMP and Annual Review reports.</p> <p>Site tour observations:</p> <ul style="list-style-type: none"> <li>- Water sprays were sighted in use during site inspection. Measures were put in place following sighting of visual dust.</li> <li>- Evidence of dust during tipping - see Photograph F.8 and F.9 in Appendix F of the Audit Report.</li> </ul> <p><b>Recommendation (REC 17):</b></p> <ul style="list-style-type: none"> <li>- Site personnel to ensure that water sprays on materials/when loading or unloading materials are being applied per the AQGHGMP to minimise dust during tipping as far as possible. The measures in the AQGHGMP relating to this should be reviewed for effectiveness.</li> </ul>	Non-compliant	NC12
O3.2	Activities occurring in or on the premises must be carried out in a manner that will minimise the generation, or emission from the premises, of wind-blown or traffic generated dust.	EMM Air quality team	AQGHGMP. Annual Reviews for 2020, 2021 and 2022.	<p>Management measures are detailed in the AQGHGMP and Annual Review reports.</p> <p>Site tour observations:</p> <ul style="list-style-type: none"> <li>- Evidence of dust during tipping - see Photograph F.8 and F.9 in Appendix F of the Audit Report.</li> <li>- Measures were put in place following sighting of visual dust.</li> </ul>	Non-compliant	NC13
O3.3	All trafficable areas, coal storage areas and vehicle manoeuvring areas in or on the premises must be maintained, at all times, in a condition that will minimise the generation, or emission from the premises, of wind-blown or traffic generated dust.	EMM Air quality team	AQGHGMP. Annual Reviews for 2020, 2021 and 2022.	<p>Site tour observations:</p> <ul style="list-style-type: none"> <li>- Evidence of dust during tipping - see Photograph F.8 and F.9 in Appendix F of the Audit Report.</li> <li>- Measures were put in place following sighting of visual dust.</li> </ul>	Non-compliant	NC14



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:	EMM Air quality team	AQGHGMP. Annual Review for 2020, 2021 and 2022. Annual Returns for 2020, 2021 and 2022. Site inspection.	Details of monitors are provided in the AQGHGMP and Annual Review reports.  Non-compliance per 2020 Annual Review report - <i>Incomplete data capture. No action required as data capture was high (at least 95% or 347 days) during the period. No action or comment required. Continue to capture data and monitor.</i>  Non-compliances in Annual Returns: - 2019-2020: PM <sub>10</sub> was not monitored continuously at EPL Point 1 (98.1%) and EPL Point 2 (92.7%) during the reporting period. - 2020-2021: PM <sub>10</sub> was not monitored continuously at EPL Point 1 (98.1%) and EPL Point 2 (92.7%) during the reporting period. - 2021-2022: PM <sub>10</sub> was not monitored continuously at EPL ID 1 (97.8%) and EPL ID 2 (52.6%) during the reporting period.	Non-compliant	NC17																																																												
M2.2	Air Monitoring Requirements  POINT 1,2 <table><tr><th>Pollutant</th><th>Units of measure</th><th>Frequency</th><th>Sampling Method</th></tr><tr><td>PM10</td><td>milligrams per cubic metre</td><td>Continuous</td><td>Special Method 1</td></tr></table>  <i>Note: Special Method 1 requires the licensee to undertake the monitoring of PM10 concentrations in strict accordance with the manufacturer's operating manual supplied with the continuous monitoring equipment, or any updated versions as published by the manufacturer.</i>	Pollutant	Units of measure	Frequency	Sampling Method	PM10	milligrams per cubic metre	Continuous	Special Method 1	EMM Air quality team	AQGHGMP. Annual Review for 2020, 2021 and 2022. Annual Returns for 2020, 2021 and 2022. Site inspection.	As above.	Non-compliant	NC18																																																				
Pollutant	Units of measure	Frequency	Sampling Method																																																															
PM10	milligrams per cubic metre	Continuous	Special Method 1																																																															
M2.3	Water and/ or Land Monitoring Requirements  POINT 14,15 <table><tr><th>Pollutant</th><th>Units of measure</th><th>Frequency</th><th>Sampling Method</th></tr><tr><td>Faecal Coliforms</td><td>colony forming units per 100 millilitres</td><td>Quarterly</td><td>Grab sample</td></tr><tr><td>pH</td><td>pH</td><td>Quarterly</td><td>Grab sample</td></tr></table>	Pollutant	Units of measure	Frequency	Sampling Method	Faecal Coliforms	colony forming units per 100 millilitres	Quarterly	Grab sample	pH	pH	Quarterly	Grab sample	EMM general audit team	Surface water pH results are presented in monthly reports Annual Returns for 2020, 2021 and 2022.	The 2020-2021 Annual Return only completed 3 samples during the annual return period. As stated in the condition, samples are required quarterly.  <b>Recommendation (REC 20):</b> Complete quarterly faecal and pH monitoring in line with the obligations of the EPL Condition M2.3.	Non-compliant	NC19																																																
Pollutant	Units of measure	Frequency	Sampling Method																																																															
Faecal Coliforms	colony forming units per 100 millilitres	Quarterly	Grab sample																																																															
pH	pH	Quarterly	Grab sample																																																															
M3 - Testing methods - concentration limits																																																																		
M3.1	Monitoring for the concentration of a pollutant emitted to the air required to be conducted by this licence must be done in accordance with: a) any methodology which is required by or under the Act to be used for the testing of the concentration of the pollutant; or b) if no such requirement is imposed by or under the Act, any methodology which a condition of this licence requires to be used for that testing; or c) if no such requirement is imposed by or under the Act or by a condition of this licence, any methodology approved in writing by the EPA for the purposes of that testing prior to the testing taking place. <i>Note: The Protection of the Environment Operations (Clean Air) Regulation 2021 requires testing for certain purposes to be conducted in accordance with test methods contained in the publication "Approved Methods for the Sampling and Analysis of Air Pollutants in NSW".</i>	EMM Air quality team	AQGHGMP. Annual Review for 2020, 2021 and 2022. Annual Returns for 2020, 2021 and 2022.	Details of monitors are provided in the AQGHGMP and Annual Review reports.  EPL 20850 describes monitoring points 1 and 2 (A-PF2 and A-PF5 respectively) as TEOMs. The equipment used on site are Palas Fidas dust monitors which are not TEOMs, are not Aus Standard.  2020 IEA report recommended that: <i>the calibration factor used with the Palas Fidas particulate monitors be based on a dataset that covers seasonal variations (rather than the single month the current calibration factors are based on) as changes in particulate loads, temperature, humidity, etc. can affect the instrument's readings.</i>  Even though the monitors are not TEOMs as stated in the EPL, the AQGHGMP was approved by DPE.	Compliant																																																													
M3.2	Subject to any express provision to the contrary in this licence, monitoring for the concentration of a pollutant discharged to waters or applied to a utilisation area must be done in accordance with the Approved Methods Publication unless another method has been approved by the EPA in writing before any tests are conducted.	EMM general audit team	Surface water monitoring records. Site visit.	Based on the surface water monitoring records and the site inspection. EMM deem this condition compliant.	Compliant																																																													
M4 - Weather monitoring																																																																		
M4.1	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 respectively.  POINT 11 <table><tr><th>Parameter</th><th>Sampling method</th><th>Units of measure</th><th>Averaging period</th><th>Frequency</th></tr><tr><td>Wind Speed at 10 metres</td><td>AM-2 &amp; AM-4</td><td>metres per second</td><td>10 minutes</td><td>Continuous</td></tr><tr><td>Wind Direction at 10 metres</td><td>AM-2 &amp; AM-4</td><td>Degrees</td><td>10 minutes</td><td>Continuous</td></tr></table> POINT 4 <table><tr><th>Parameter</th><th>Sampling method</th><th>Units of measure</th><th>Averaging period</th><th>Frequency</th></tr><tr><td>Wind Speed at 10 metres</td><td>AM-2 &amp; AM-4</td><td>metres per second</td><td>10 minutes</td><td>Continuous</td></tr><tr><td>Temperature at 2 metres</td><td>AM-4</td><td>degrees Celsius</td><td>10 minutes</td><td>Continuous</td></tr><tr><td>Sigma Theta</td><td>AM-2 &amp; AM-4</td><td>degrees Celsius</td><td>10 minutes</td><td>Continuous</td></tr><tr><td>Rainfall</td><td>AM-4</td><td>millimetres per hour</td><td>1 hour</td><td>Continuous</td></tr><tr><td>Relative humidity</td><td>AM-4</td><td>percent</td><td>1 hour</td><td>Continuous</td></tr><tr><td>Silox</td><td>AM-1</td><td>None</td><td>-</td><td>-</td></tr><tr><td>Temperature at 10 metres</td><td>AM-4</td><td>degrees Celsius</td><td>10 minutes</td><td>Continuous</td></tr><tr><td>Total Solar Radiation</td><td>AM-4</td><td>Watts per square metre</td><td>10 minutes</td><td>Continuous</td></tr></table>	Parameter	Sampling method	Units of measure	Averaging period	Frequency	Wind Speed at 10 metres	AM-2 & AM-4	metres per second	10 minutes	Continuous	Wind Direction at 10 metres	AM-2 & AM-4	Degrees	10 minutes	Continuous	Parameter	Sampling method	Units of measure	Averaging period	Frequency	Wind Speed at 10 metres	AM-2 & AM-4	metres per second	10 minutes	Continuous	Temperature at 2 metres	AM-4	degrees Celsius	10 minutes	Continuous	Sigma Theta	AM-2 & AM-4	degrees Celsius	10 minutes	Continuous	Rainfall	AM-4	millimetres per hour	1 hour	Continuous	Relative humidity	AM-4	percent	1 hour	Continuous	Silox	AM-1	None	-	-	Temperature at 10 metres	AM-4	degrees Celsius	10 minutes	Continuous	Total Solar Radiation	AM-4	Watts per square metre	10 minutes	Continuous	EMM general audit team	Annual Returns for 2020, 2021 and 2022.	The 2022 Annual Return reported a non-compliance against this condition stating: "Meteorological data at EPA ID 4 and 11 was not captured continuously (uninterrupted) during the reporting period."  Compliance with this condition was achieved during 2020 and 2021.	Non-compliant	NC20
Parameter	Sampling method	Units of measure	Averaging period	Frequency																																																														
Wind Speed at 10 metres	AM-2 & AM-4	metres per second	10 minutes	Continuous																																																														
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Total Solar Radiation	AM-4	Watts per square metre	10 minutes	Continuous																																																														
M4.2	All methods specified in conditions M4.1 are specified in the <i>Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales</i> ('Approved Methods') and all monitoring must be conducted strictly in accordance with the requirements outlined the Approved Methods.	EMM general audit team	Monitoring reports. Annual Returns for 2020, 2021 and 2022.	All monitoring was completed in accordance with the Approved Methods.	Compliant																																																													
M5 - Recording of pollution complaints																																																																		
M5.1	The licensee must keep a legible record of all complaints made to the licensee or any employee or agent of the licensee in relation to pollution arising from any activity to which this licence applies.	EMM general audit team	Complaints records.	Annual complaints summaries for 2020, 2021 and 2022 are available on the MPO website.	Compliant																																																													
M5.2	The record must include details of the following: a) the date and time of the complaint; b) the method by which the complaint was made; c) any personal details of the complainant which were provided by the complainant or, if no such details were provided, a note to that effect; d) the nature of the complaint; e) the action taken by the licensee in relation to the complaint, including any follow-up contact with the complainant; and f) if no action was taken by the licensee, the reasons why no action was taken.	EMM general audit team	Complaints records.	Annual complaints summaries for 2020, 2021 and 2022 are available on the MPO website.	Compliant																																																													
M5.3	The record of a complaint must be kept for at least 4 years after the complaint was made.	EMM general audit team	Complaints records.	Site have confirmed they do not delete records of complaints. Annual complaints summaries for 2020, 2021 and 2022 are available on the MPO website.	Compliant																																																													
M5.4	The record must be produced to any authorised officer of the EPA who asks to see them.	EMM general audit team	Complaints records.	All records of complaints have been provided to the EPA following a complaint.	Compliant																																																													
M6 - Telephone complaints line																																																																		
M6.1	The licensee must operate during its operating hours a telephone complaints line for the purpose of receiving any complaints from members of the public in relation to activities conducted at the premises or by the vehicle or mobile plant, unless otherwise specified in the licence.	EMM general audit team	MPO website.	The MPO website displays the community hotline, blasting hotline and general enquiries phone numbers on the home page. Ads were also included in the local paper during the MPOD 4 Rail 2 project.	Compliant																																																													
M6.2	The licensee must notify the public of the complaints line telephone number and the fact that it is a complaints line so that the impacted community knows how to make a complaint.	EMM general audit team	MPO website.	The MPO website displays the community hotline, blasting hotline and general enquiries phone numbers on the home page. Ads were also included in the local paper during the MPOD 4 Rail 2 project.	Compliant																																																													
M6.3	The preceding two conditions do not apply until two weeks from the date of the issue of this licence.	EMM general audit team	Noted.	Noted.	Compliant																																																													
M7 - Blasting																																																																		



M7.1	<p>To determine compliance with the blast limits specified in this licence:</p> <p>a) Airblast overpressure and ground vibration levels must be measured and electronically recorded for Monitoring Points 3, 12 and 13 for the parameters specified in column 1 of the table below; and</p> <p>b) The licensee must use the units of measure, sampling method and sample at the frequency specified opposite in the other columns.</p>	Bridges Acoustics	Blast Management Plan. Blast monitoring data.	The Blast Management Plan includes monitoring points 3, 12 and 13. Blast monitoring data for the audit period include these points.	Compliant																																																													
<table><tr><th>Parameter</th><th>Units of Measure</th><th>Frequency</th><th>Sampling Method</th></tr><tr><td>Airblast Overpressure</td><td>Decibels (Linear Peak)</td><td>All blasts</td><td>Australian Standard AS 2187.2-2006</td></tr><tr><td>Ground Vibration Peak Particle Velocity</td><td>millimetres/second</td><td>All blasts</td><td>Australian Standard AS 2187.2-2006</td></tr></table>							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																																																
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M8 - Other monitoring and recording conditions																																																																		
M8.1	<p><b>Requirement to Monitor Particulate Matter</b></p> <p>The licensee must record the average PM10 concentration at Monitoring Points 1 and 2 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.</p> <p>POINT 11</p> <table><tr><th>Parameter</th><th>Sampling method</th><th>Units of measure</th><th>Averaging period</th><th>Frequency</th></tr><tr><td>Wind Speed at 10 metres</td><td>AM-2 &amp; AM-4</td><td>metres per second</td><td>10 minutes</td><td>Continuous</td></tr><tr><td>Wind Direction at 10 metres</td><td>AM-2 &amp; AM-4</td><td>Degrees</td><td>10 minutes</td><td>Continuous</td></tr></table> <p>POINT 4</p> <table><tr><th>Parameter</th><th>Sampling method</th><th>Units of measure</th><th>Averaging period</th><th>Frequency</th></tr><tr><td>Wind Speed at 10 metres</td><td>AM-2 &amp; AM-4</td><td>metres per second</td><td>10 minutes</td><td>Continuous</td></tr><tr><td>Temperature at 2 metres</td><td>AM-4</td><td>degrees Celsius</td><td>10 minutes</td><td>Continuous</td></tr><tr><td>Sigma Theta</td><td>AM-2 &amp; AM-4</td><td>degrees Celsius</td><td>10 minutes</td><td>Continuous</td></tr><tr><td>Rainfall</td><td>AM-4</td><td>millimetres per hour</td><td>1 hour</td><td>Continuous</td></tr><tr><td>Relative humidity</td><td>AM-4</td><td>percent</td><td>1 hour</td><td>Continuous</td></tr><tr><td>Siting</td><td>AM-1</td><td>None</td><td>-</td><td>-</td></tr><tr><td>Temperature at 10 metres</td><td>AM-4</td><td>degrees Celsius</td><td>10 minutes</td><td>Continuous</td></tr><tr><td>Total Solar Radiation</td><td>AM-4</td><td>Watts per square metre</td><td>10 minutes</td><td>Continuous</td></tr></table>	Parameter	Sampling method	Units of measure	Averaging period	Frequency	Wind Speed at 10 metres	AM-2 & AM-4	metres per second	10 minutes	Continuous	Wind Direction at 10 metres	AM-2 & AM-4	Degrees	10 minutes	Continuous	Parameter	Sampling method	Units of measure	Averaging period	Frequency	Wind Speed at 10 metres	AM-2 & AM-4	metres per second	10 minutes	Continuous	Temperature at 2 metres	AM-4	degrees Celsius	10 minutes	Continuous	Sigma Theta	AM-2 & AM-4	degrees Celsius	10 minutes	Continuous	Rainfall	AM-4	millimetres per hour	1 hour	Continuous	Relative humidity	AM-4	percent	1 hour	Continuous	Siting	AM-1	None	-	-	Temperature at 10 metres	AM-4	degrees Celsius	10 minutes	Continuous	Total Solar Radiation	AM-4	Watts per square metre	10 minutes	Continuous	EMM Air quality team	AQGHGMP. Annual Review for 2020, 2021 and 2022. Annual Returns for 2020, 2021 and 2022 Monitoring data spreadsheets.	10 min PM <sub>10</sub> data provided in spreadsheets: - Air Quality Data Jan - Dec 2020.xlsx - Annual Air Quality Compiled Data 2021.xlsx - 2022_Air Quality Compiled Data.xlsx  The 2021 data spreadsheet includes a column listed as 'PM <sub>10</sub> TEOM' in the A-PF5 tab however, the Annual Review reports do not state that there is a TEOM at the site. This is not in the 2020 or 2022 spreadsheets.  <b>Recommendation (REC 21):</b> The 2021 met data spreadsheet should be amended if there is not actually a TEOM on-site. The monitoring equipment should be clear in all spreadsheets going forward.	Compliant	
Parameter	Sampling method	Units of measure	Averaging period	Frequency																																																														
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M9 - Noise monitoring																																																																		
M9.1	<p>To assess compliance with the noise limits specified within this licence, the licensee must undertake operator attended noise monitoring at each specified noise monitoring point in accordance with the table below.</p> <p>POINT 5,6,7,8,9,10</p> <table><tr><th>Assessment period</th><th>Minimum frequency in a reporting period</th><th>Minimum duration within assessment period</th><th>Minimum number of assessment period</th></tr><tr><td>Night</td><td>Monthly</td><td>15 minutes</td><td>1 operation day</td></tr></table>	Assessment period	Minimum frequency in a reporting period	Minimum duration within assessment period	Minimum number of assessment period	Night	Monthly	15 minutes	1 operation day	Bridges Acoustics	Noise Management Plan. Noise monitoring reports.	The Noise Management Plan requires noise monitoring for one 15 minute period per month at night as required by this condition. Noise monitoring reports include monthly noise data complying with this condition.	Compliant																																																					
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M9.2	<p>To assess compliance with the noise limits specified within the licence, operator attended noise monitoring must be undertaken in accordance with Conditions L3.2 to L3.4:</p> <p>a) at the noise monitoring locations specified in condition P1.3; and</p> <p>b) occur every calendar month in a reporting period; and</p> <p>c) occur during one night time period as defined in the Industrial Noise Policy (EPA 2000) for a minimum of 15 minutes at each location from a).</p>	Bridges Acoustics	Noise Management Plan. Noise monitoring reports.	The Noise Management Plan requires noise monitoring at locations N-AT1 to N-AT6 each month at night for a 15 minute period as required by this condition. Noise monitoring reports include noise measurement data complying with this condition.	Compliant																																																													
M9.3	<p>For the purposes of compliance monitoring and determining the noise generated at the premises the modification factors in Fact Sheet C of the Noise Policy for Industry (EPA 2017) must be applied, as appropriate, to the noise levels measured by noise monitoring equipment.</p>	Bridges Acoustics	Noise Management Plan. Noise monitoring reports.	Section 9.2.3 of the Noise Management Plan requires an assessment of modifying factors as required by this condition. Noise monitoring reports include an assessment of modifying factors including tonality and dominant low frequency for each 15 minute measurement period, and apply corrections to measured noise levels as required.	Compliant																																																													
M9.4	<p>Where required in writing by the EPA, the licensee must carry out attended noise monitoring at sensitive receivers in addition to the monitoring required by Condition M9.2.</p>	Bridges Acoustics	Noise Management Plan. Noise monitoring reports.	Additional noise monitoring was completed after non-compliances were reported in April 2020, July 2020 and August 2021. Additional noise monitoring is being carried out after a reported non-compliance in November 2022, however relevant reports are not yet available.	Compliant																																																													
6 - Reporting Conditions																																																																		
R1 - Annual return documents																																																																		
R1.1	<p>The licensee must complete and supply to the EPA an Annual Return in the approved form comprising:</p> <p>1. a Statement of Compliance,</p> <p>2. a Monitoring and Complaints Summary,</p> <p>3. a Statement of Compliance - Licence Conditions,</p> <p>4. a Statement of Compliance - Load based Fee,</p> <p>5. a Statement of Compliance - Requirement to Prepare Pollution Incident Response Management Plan,</p> <p>6. a Statement of Compliance - Requirement to Publish Pollution Monitoring Data; and</p> <p>7. a Statement of Compliance - Environmental Management Systems and Practices.</p> <p>At the end of each reporting period, the EPA will provide to the licensee notification that the Annual Return is due.</p>	EMM general audit team	Annual Returns for 2020, 2021 and 2022.	All Annual Returns have been submitted to the EPA via the portal and satisfy this condition.	Compliant																																																													
R1.2	<p>An Annual Return must be prepared in respect of each reporting period, except as provided below.</p> <p><i>Note: The term "reporting period" is defined in the dictionary at the end of this licence. Do not complete the Annual Return until after the end of the reporting period.</i></p>	EMM general audit team	Annual Returns for 2020, 2021 and 2022.	All Annual Returns have been submitted to the EPA via the portal and satisfy this condition.	Compliant																																																													
R1.3	<p>Where this licence is transferred from the licensee to a new licensee:</p> <p>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</p> <p>b) the new licensee must prepare an Annual Return for the period commencing on the date the application for the transfer of the licence is granted and ending on the last day of the reporting period.</p> <p><i>Note: An application to transfer a licence must be made in the approved form for this purpose.</i></p>	EMM general audit team	N/A	There have been no licence transfers during the audit period.	Not triggered																																																													
R1.4	<p>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:</p> <p>a) in relation to the surrender of a licence - the date when notice in writing of approval of the surrender is given; or</p> <p>b) in relation to the revocation of the licence - the date from which notice revoking the licence operates.</p>	EMM general audit team	N/A	There have been no licence surrenders during the audit period.	Not triggered																																																													
R1.5	<p>The Annual Return for the reporting period must be supplied to the EPA via eConnect EPA or by registered post not later than 60 days after the end of each reporting period or in the case of a transferring licence not later than 60 days after the date the transfer was granted (the 'due date').</p>	EMM general audit team	N/A	There have been no licence transfers during the audit period.	Not triggered																																																													
R1.6	<p>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.</p>	EMM general audit team	Annual Returns for 2020, 2021 and 2022.	All Annual Returns are retained by site. EMM have sighted copies of the Annual Returns.	Compliant																																																													
R1.7	<p>Within the Annual Return, the Statements of Compliance must be certified and the Monitoring and Complaints Summary must be signed by:</p> <p>a) the licence holder; or</p> <p>b) by a person approved in writing by the EPA to sign on behalf of the licence holder.</p>	EMM general audit team	Annual Returns for 2020, 2021 and 2022.	All Annual Returns were signed by the MACH Energy Managing Director and the Company Secretary.	Compliant																																																													
R2 - Notification of environmental harm																																																																		

R2.1	Notifications must be made by telephoning the Environment Line service on 131 555. <i>Note: The licensee or its employees must notify all relevant authorities of incidents causing or threatening material harm to the environment immediately after the person becomes aware of the incident in accordance with the requirements of Part 5.7 of the Act.</i>	EMM general audit team	Site confirmed that the water discharge events were reported via the Environment Line service on 131 555.	Seven water discharge events occurred during the audit period following periods of heavy rain. These occurred on: * 8 March 2021 - failure of erosion and sediment controls resulted in run off leaving site. * 8 June 2021 - two separate discharges of sediment-laden water from MOD 4 construction area and into Wybong Road swale drains, where it ceased. * 12 November 2021 - discharge of sediment-laden water from the Rail 2 Project Area and into Wybong Road swale drains. * 8 December 2021 - discharge from four sediment basins (SD4, SD6, SD7 and ED2) offsite. * 9 December 2021 - discharge from four sediment basins (SD4, SD6, SD7 and ED2) offsite. * 8 March 2022 - discharge from five sediment basins (SD1, SD4, SD6, SD7 and TSB2) offsite. * 21 October 2022 - spillway discharge was observed from SD4. These were all reported via the Environment Line service on 131 555 immediately.	Compliant	
R2.2	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.	EMM general audit team	Written notifications to EPA.	EMM sighted written notification of the incidents were provided to the EPA with in 7 days of the date on which they became aware of the incident.	Compliant	
<b>R3 - Written report</b>						
R3.1	Where an authorised officer of the EPA suspects on reasonable grounds that: a) where this licence applies to premises, an event has occurred at the premises; or b) where this licence applies to vehicles or mobile plant, an event has occurred in connection with the carrying out of the activities authorised by this licence, and the event has caused, is causing or is likely to cause material harm to the environment (whether the harm occurs on or off premises to which the licence applies), the authorised officer may request a written report of the event.	EMM general audit team	Written notifications to EPA.	Following an incident, MPO provided written notification to the EPA within 7 days of the even occurring. EMM has sighted evidence of the written notifications.	Compliant	
R3.2	The licensee must make all reasonable inquiries in relation to the event and supply the report to the EPA within such time as may be specified in the request.	EMM general audit team	Written notifications to EPA.	Following an incident, MPO provided written notification to the EPA within 7 days of the even occurring. EMM has sighted evidence of the written notifications.	Compliant	
R3.3	The request may require a report which includes any or all of the following information: a) the cause, time and duration of the event; b) the type, volume and concentration of every pollutant discharged as a result of the event; c) the name, address and business hours telephone number of employees or agents of the licensee, or a specified class of them, who witnessed the event; d) the name, address and business hours telephone number of every other person (of whom the licensee is aware) who witnessed the event, unless the licensee has been unable to obtain that information after making reasonable effort; e) action taken by the licensee in relation to the event, including any follow-up contact with any complainants; f) details of any measure taken or proposed to be taken to prevent or mitigate against a recurrence of such an event; and g) any other relevant matters.	EMM general audit team	Written notifications to EPA.	Following an incident, MPO provided written notification to the EPA within 7 days of the even occurring. EMM has sighted evidence of the written notifications. All notification included the information listed in the condition.	Compliant	
R3.4	The EPA may make a written request for further details in relation to any of the above matters if it is not satisfied with the report provided by the licensee. The licensee must provide such further details to the EPA within the time specified in the request.	EMM general audit team	Written notifications to EPA.	Following an incident, MPO provided written notification to the EPA within 7 days of the even occurring. EMM has sighted evidence of the written notifications. Where additional information was requested from MPO, MPO prepared an additional letter to EPA with the requested information.	Compliant	
<b>R4 - Other notifications</b>						
R4.1	<b>Blast Exceedance Notification</b> The licensee must report any exceedance of the blast limits specified in this licence to the EPA at info@epa.nsw.gov.au as soon as practicable after the exceedance becomes known to the licensee or to one of its employees or agents.	Bridges Acoustics	N/A	No exceedances of the blast limits (at monitors representing sensitive locations) occurred during the audit period	Not triggered	
R4.2	<b>Noise Exceedance Notification</b> The licensee must report any exceedance of noise limits specified in this licence to the EPA at info@epa.nsw.gov.au as soon as practicable after the exceedance becomes known to the licensee or to one of its employees or agents.	Bridges Acoustics	Annual Returns for 2020, 2021 and 2022.	The following exceedances of the noise limits occurred: 5 dBA above the LA1,1min limit at N-AT4 in April 2020. The April monitoring report stated this exceedance was reported to the EPA, and DPIE was notified on 29 April. 3 dBA above the LAeq,15min limit and 6 dBA above the LA1,1min limit at N-AT3 in July 2020. The July monitoring report stated these events were being investigated. The EPA was notified on 29 July. 2 dBA above the LA1,1min limit at N-AT3 in July 2021, followed by a second measurement showing compliance. As the result did not exceed 2 dBA above the limit and the second measurement indicated a sustained exceedance did not occur, no notification was required. 11 dBA above the LA1,1min limit at N-AT4, followed by a second measurement showing 3 dBA above the limit, in August 2021. EPA and DPIE were notified on 1 September. 13 dBA above the LA1,1min limit at N-AT4 followed by a second measurement showing 16 dBA above the limit, and 4 dBA above the limit at N-AT5, in November 2022. The EPA was notified on 17 November and DPIE on 24 November.	Compliant	
R4.3	<b>Dust Shutdown Notification</b> The licensee must report any exceedance of the 1 hour dust shutdown timeframe prescribed in condition O3.6 of this licence to the EPA at info@epa.nsw.gov.au as soon as practicable after the exceedance becomes known to the licensee or to one of its employees or agents.	EMM Air quality team	Annual Reviews for 2020, 2021 and 2022.	No exceedance of the dust shutdowns timeframe noted in Annual Review reports.	Compliant	
R4.4	<b>Notification of Pollutions of Waters</b> 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 L1.1 of this licence.	EMM general audit team	Site confirmed that the water discharge events were reported via the Environment Line service on 131 555.	Seven water discharge events occurred during the audit period following periods of heavy rain. These occurred on: * 8 March 2021 - failure of erosion and sediment controls resulted in run off leaving site. * 8 June 2021 - two separate discharges of sediment-laden water from MOD 4 construction area and into Wybong Road swale drains, where it ceased. * 12 November 2021 - discharge of sediment-laden water from the Rail 2 Project Area and into Wybong Road swale drains. * 8 December 2021 - discharge from four sediment basins (SD4, SD6, SD7 and ED2) offsite. * 9 December 2021 - discharge from four sediment basins (SD4, SD6, SD7 and ED2) offsite. * 8 March 2022 - discharge from five sediment basins (SD1, SD4, SD6, SD7 and TSB2) offsite. * 21 October 2022 - spillway discharge was observed from SD4. These were all reported via the Environment Line service on 131 555 immediately.	Compliant	
R4.5	The licensee must provide written details of the notification to the EPA at info@epa.nsw.gov.au within 7 days of the date of the notification.	EMM general audit team	Written notifications to EPA.	EMM sighted written notification of the incidents were provided to the EPA with in 7 days of the date on which they became aware of the incident.	Compliant	
<b>R5 - Other reporting conditions</b>						
R5.1	<b>Reporting of Blast Monitoring</b> R5.1 For each Annual Return reporting period the licensee must submit a Blast Monitoring Report to the EPA for that period. The report must: a) include the results of the blast monitoring required by this licence; b) identify any exceedance of the blast limits in this licence; and c) describe management actions taken to address any exceedances.	Bridges Acoustics	Annual Returns for 2020, 2021 and 2022. Blast monitoring data.	The 2020, 2021 and 2022 Annual Reviews include a summary of blast monitoring results. No exceedances of the blast criteria occurred during these periods at any residence or other sensitive location.	Compliant	
R5.2	<b>Noise Monitoring Report</b> For each Annual Return reporting period the licensee must submit a Noise Compliance Assessment Report to the EPA for that period. The report must: a) be prepared by an appropriately qualified acoustic consultant and determine compliance with noise limits specified in this licence; b) include all routine attended monitoring undertaken throughout the year; c) include measurement and reporting of C-weighted noise levels; and d) outline management actions taken within the monitoring period to address any exceedances of the limits specified in this licence.	Bridges Acoustics	Annual Returns for 2020, 2021 and 2022. Noise Monitoring Reports. Noise monitoring data.	This condition requires a specific noise compliance assessment report prepared by an independent consultant for each Annual Return reporting period. While the contents of the report are also available to the EPA in the monthly monitoring reports and Annual Reviews, those reports were not prepared by an appropriately qualified acoustic consultant and do not satisfy this condition.  <b>Recommendation (REC 22):</b> Noise Compliance Assessment Reports are to be prepared by an appropriately qualified acoustic consultant.	Non-compliant	NC21

R5.3	<b>Dust Monitoring Report</b> For each Annual Return reporting period the licensee must submit a Dust Monitoring Report to the EPA for that period. The report must include: a) details of times, wind speeds and wind direction during 'adverse conditions'; b) details of the date, time and duration when dust generating activities were ceased in accordance with condition O3.4; c) weather conditions monitored at Monitoring Point 4: i. during the period when dust generating activities were ceased; ii. for the 24 hour period immediately prior to dust generating activities being ceased; and iii. for the 24 hour period immediately after dust generating activities resumed. d) PM10 monitoring data measured at Monitoring Points 1 and 2: i. during the period when dust generating activities were ceased; ii. for the 24 hour period immediately prior to dust generating activities being ceased; and iii. for the 24 hour period immediately after dust generating activities resumed. e) details of the date and time dust generating activities were resumed; f) a list of days when the average 24 hour PM10 at the Muswellbrook Upper Hunter Air Quality Monitoring Network monitor exceeded 50 µg/m3. g) 10 minute wind speed and direction data at Monitoring Point 4 for days when the average 24 hour PM10 at the Muswellbrook Upper Hunter Air Quality Monitoring Network monitor exceeded 50 µg/m3. h) 10 minute PM10 data from Monitoring Points 1 and 2 for days when the average 24 hour PM10 at the Muswellbrook Upper Hunter Air Quality Monitoring Network monitor exceeded 50 µg/m3. <i>Note: This information is necessary for the EPA to review whether conditions O3.4 to O3.8 are achieving the objective of ensuring that activities carried on at the premises do not increase the number of days when average PM10 concentrations in Muswellbrook exceed 50ug/m3. The EPA may review these conditions if this objective is not being achieved.</i>	EMM Air quality team	Annual Returns for 2020, 2021 and 2022.	* 2019-2020 and 2020-2021 excel spreadsheets provided with Annual Returns include data requested. * 2021-2022 spreadsheet does not contain any data as there were no shutdowns.	Compliant	
R5.4	<b>Sewage Treatment Systems</b> For each Annual Return reporting period the licensee must submit a Sewage Treatment System Maintenance Report to the EPA for that period. The report must include: a) sewage system maintenance program including any logs; b) results of any water quality sampling undertaken; c) any system issues identified; and d) <b>management response to any issues.</b>	EMM general audit team	Annual Returns for 2020, 2021 and 2022.	All Annual Returns have been submitted to the EPA via the portal and satisfy this condition.	Compliant	
R5.5	The licensee must retain a copy of each report as required by Condition O2.5 for 3 years from the date each record is made.	EMM general audit team	Reports related to Condition R5.	All reports are kept on the MPO server for more than 3 years. Evidence of this was sighted during site visit.	Compliant	
R5.6	<b>Heavy Plant Tyre Disposal Report</b> For each Annual Return reporting period the licensee must submit a Heavy Plant Tyre Disposal Report to the EPA for that period. The report must include the following information for each waste tyre: a) the size and type; b) disposal date; c) cumulative tonnage of waste tyres disposed in each disposal area; d) GPS coordinates (easting and northing) of the disposal location; e) the Real Level (RL) in metres of the burial depth; and f) where reasonably available the purchase date, supplier and serial number.	EMM general audit team	Annual Returns for 2020, 2021 and 2022.	All Annual Returns have been submitted to the EPA via the portal and satisfy this condition.	Compliant	
<b>7 - General Conditions</b>						
<b>G1 - Copy of licence kept at the premises or plant</b>						
G1.1	A copy of this licence must be kept at the premises to which the licence applies.	EMM general audit team	EPL 20850 sighted in site office.	A copy of EPL 20850 was sighted in the site office during the site inspection.	Compliant	
G1.2	The licence must be produced to any authorised officer of the EPA who asks to see it.	EMM general audit team	N/A	A copy of EPL 20850 was not requested by the EPA during the audit period.	Not triggered	
G1.3	The licence must be available for inspection by any employee or agent of the licensee working at the premises.	EMM general audit team	Noted.	A copy of EPL 20850 is kept in the site office. This will be made available for any inspection or employee/agent, if required.	Not triggered	
<b>G2 - Contact number for incidents and responsible employees</b>						
G2.1	The licensee must operate 24-hour telephone contact lines for the purpose of enabling the EPA to directly contact one or more representatives of the licensee who can: a) respond at all times to incidents relating to the premises; and b) contact the licensee's senior employees or agents authorised at all times to: i) speak on behalf of the licensee; and ii) <b>provide any information or document required under this licence.</b>	EMM general audit team	MPO website. Emails to/from EPA/Andrew Reid.	The MPO website displays the community hotline, blasting hotline and general enquiries phone numbers on the home page. Andrew Reid (Environment Superintendent) is the primary contact for the EPA. The EPA have all contact details for Andrew and are in regular contact.	Compliant	
G2.2	The licensee is to inform the EPA in writing of the appointment of any subsequent contact persons, or changes to the person's contact details as soon as practicable and in any event within fourteen days of the appointment or change.	EMM general audit team	N/A	There has been no change to contact persons or changes to the person's details during the audit period.	Not triggered	

Table A.4 - Mining Leases

Section	Requirement	Evidence collected	Independent Audit Findings and Recommendations	Compliance status	Unique Identification Non-compliance																		
ML 1645, ML 1708, ML 1709, ML 1713, ML 1750, ML 1808 (2022)																							
General conditions																							
Notice to Landholders																							
1	(a) Within 90 days from the date of grant or renewal of this mining lease, the lease holder must give each landholder notice in writing: (i) that this mining lease has been granted or renewed; and (ii) whether the lease includes the surface. The notice must include a plan identifying the lease area and each landholder and individual land parcel within the lease area. (b) If there are ten or more landholders to which notice must be given, the lease holder will be taken to have complied with condition 1(a) if a notice complying with condition 1(a) is published in a newspaper circulating in the region where the lease area is situated.	N/A	There have been no lease renewals during the audit period.	Not triggered																			
Group Security																							
2	The security deposit to be provided and maintained for this mining lease is part of a group security deposit. The lease holder is required to provide and maintain a security deposit to secure funding for the fulfilment of obligations under the mining leases covered by the group security deposit, including obligations under each mining lease that may arise in the future. The amount of the security deposit to be provided as a group security deposit has been assessed at \$73,458,673. The leases covered by the group security include this ML 1645 (1992) and: <table><tr><th>Lease type</th><th>Lease Number</th><th>Act Year</th></tr><tr><td>ML</td><td>1708</td><td>1992</td></tr><tr><td>ML</td><td>1709</td><td>1992</td></tr><tr><td>ML</td><td>1713</td><td>1992</td></tr><tr><td>ML</td><td>1750</td><td>1992</td></tr><tr><td>ML</td><td>1808</td><td>1992</td></tr></table>	Lease type	Lease Number	Act Year	ML	1708	1992	ML	1709	1992	ML	1713	1992	ML	1750	1992	ML	1808	1992	Letter from DPE dated 4/11/22 confirming security deposit following review.	The condition is determined as being compliant following review of the letter provided by MPO.	Compliant	
Lease type	Lease Number	Act Year																					
ML	1708	1992																					
ML	1709	1992																					
ML	1713	1992																					
ML	1750	1992																					
ML	1808	1992																					
Cooperation Agreement																							
3	The lease holder must make every reasonable attempt, and be able to demonstrate its attempts to the satisfaction of the Secretary, to enter into a cooperation agreement with the holder(s) of any overlapping authorisations issued under the <i>Mining Act 1992</i> and petroleum titles issued under the <i>Petroleum (Onshore) Act 1991</i> . The cooperation agreement should address but not be limited to: <ul style="list-style-type: none"><li>• access arrangements</li><li>• operational interaction procedures</li><li>• dispute resolution</li><li>• information exchange</li><li>• well location</li><li>• timing of drilling</li><li>• potential resource extraction conflicts; and</li><li>• rehabilitation issues.</li></ul>	N/A	No overlapping tenures identified.	Not triggered																			
Assessable Prospecting Operations																							
4	(a) The lease holder must not carry out any assessable prospecting operation on land over which this lease has been granted unless: (i) it is carried out in accordance with any necessary development consent; or (ii) if development consent is not required, the prior written approval of the Minister has been obtained. (b) The Minister may require the lease holder to provide such information as required to assist the Minister to consider an application for approval. (c) An approval granted by the Minister under this condition may be granted subject to terms. (d) The lease holder must comply with the approval granted to the holder under this condition.	N/A	There has been no evidence to determine this condition as non-compliant.  No requests have been made by the Minister.	Compliant																			
Special conditions																							
Dams Safety – Mining Leases																							
5a	The lease holder must not mine within any part of the lease area which is within the notification area of the Mount Pleasant Tailings Dam, Mount Pleasant Mine Water Dam, Mt Pleasant Environmental Dam 3, Bengalla Clean Water Dam 1, Mount Pleasant Tailings Dam Notification Area, Mount Pleasant Mine Water Dam Notification Area, Mount Pleasant Environmental Dam 3 Notification Area, and Bengalla Clean Water Dam 1 Notification Area without the prior written approval of the Minister and subject to any conditions the Minister may stipulate.	Letter from Resources Regulator dated 28/10/22 approving mining within Notification Area. Bi-Monthly Report to Dam Safety NSW Dam Safety NSW Standard Mining Conditions (Annexure D) Monitoring summary Declared Dams Audit	EMM reviewed evidence that MPO applied to Dams Safety NSW to mine within the Notification Area. This was supported by Bi-Monthly Reports to Dam Safety NSW and regular monitoring. A Declared Dams Audit was completed on 17/2/22 regarding the Mount Pleasant Tailings Storage Facility Stage 2 embankment raise project. The audit determined no regulatory non-compliances.	Compliant																			
5b	Where the lease holder desires to mine within the notification area, the lease holder must: (i) at least twelve (12) months before mining is to commence or such lesser time as the Minister may permit, notify the Minister of the desire to do so. A plan of the mining system to be implemented must accompany the notice; and (ii) provide such information as the Minister may direct.	Letter from Resources Regulator dated 28/10/22 approving mining within Notification Area. Bi-Monthly Report to Dam Safety NSW Dam Safety NSW Standard Mining Conditions (Annexure D) Monitoring summary Declared Dams Audit	EMM reviewed evidence that MPO applied to Dams Safety NSW to mine within the Notification Area. This was supported by Bi-Monthly Reports to Dam Safety NSW and regular monitoring. A Declared Dams Audit was completed on 17/2/22 regarding the Mount Pleasant Tailings Storage Facility Stage 2 embankment raise project. The audit determined no regulatory non-compliances.	Compliant																			
5c	The Minister must not, except in the circumstances set out in sub-paragraph (ii), grant approval unless sub-paragraph (i) of this paragraph has been complied with. (i) This sub-paragraph is complied with if: (a) Dams Safety NSW as constituted by section 6 of the <i>Dams Safety Act 2015</i> and the owner of the dam have been notified in writing of the desire to mine referred to in paragraph (b). (b) the notifications referred to in clause (a) are accompanied by a description or plan of the area to be mined. (c) the Secretary has complied with any reasonable request made by Dams Safety NSW or the owner of the dam for further information in connection with the mining proposal. (d) Dams Safety NSW has made its recommendations concerning the mining proposal or has informed the Minister in writing that it does not propose to make any such recommendations; and (e) where Dams Safety NSW has made recommendations the approval is in terms that are: - In accordance with those recommendations; or - where the Minister does not accept those recommendations or any of them - in accordance with a determination under sub-paragraph (ii) of this paragraph. (ii) Where the Minister does not accept the recommendations of Dams Safety NSW or where Dams Safety NSW has failed to make any recommendations and has not informed the Minister in writing that it does not propose to make any recommendations, the approval shall be in terms that are, in relation to matters dealing with the safety of the dam: - as determined by agreement between the Minister and the Minister administering the <i>Dams Safety Act 2015</i> ; or - in the event of failure to reach such agreement - as determined by the Premier.	Letter from Resources Regulator dated 28/10/22 approving mining within Notification Area. Bi-Monthly Report to Dam Safety NSW Dam Safety NSW Standard Mining Conditions (Annexure D) Monitoring summary Declared Dams Audit	EMM reviewed evidence that MPO applied to Dams Safety NSW to mine within the Notification Area. This was supported by Bi-Monthly Reports to Dam Safety NSW and regular monitoring. A Declared Dams Audit was completed on 17/2/22 regarding the Mount Pleasant Tailings Storage Facility Stage 2 embankment raise project. The audit determined no regulatory non-compliances.	Compliant																			
5d	The Minister, on notice from Dams Safety NSW, may at any time or times: (i) cancel any approval given where a notice pursuant to section 19 of the <i>Dams Safety Act 2015</i> is given. (ii) suspend for a period of time, alter, omit from or add to any approval given or conditions imposed.	N/A	There were no approvals cancelled or suspended on notice from Dam Safety NSW during the audit period.	Not triggered																			
ML 1645, ML 1708, ML 1709, ML 1713, ML 1750, ML 1808 (2013 as modified)																							
Notice to Landholders																							
1	(a) Within a period of three months from the date of grant/renewal of this mining lease, the lease holder must serve on each landholder a notice in writing indicating that this mining lease has been granted/renewed and whether the lease includes the surface. A plan identifying each landholder and individual land parcel subject to the lease area, and a description of the lease area must accompany the notice. (b) If there are ten or more landholders, the lease holder may serve the notice by publication in a newspaper circulating in the region where the lease area is situated. The notice must indicate that this mining lease has been granted/renewed; state whether the lease includes the surface and must contain a plan and description of the lease area. If a notice is made under condition 1(b), compliance with condition 1(a) is not required.	N/A	There have been no lease renewals during the audit period.	Not triggered																			
Rehabilitation																							
2	Any disturbance resulting from the activities carried out under this mining lease must be rehabilitated to the satisfaction of the Minister.	Site inspection. Annual Reviews for 2020, 2021 and 2022.	Rehabilitation was inspected during the site inspection. There have been no notifications from the Minister with regards to rehabilitation. No rehabilitation has been signed off or relinquished at MPO.	Compliant																			

Mining Operations Plan and Annual Rehabilitation Report					
3	<p>(a) The lease holder must comply with an approved Mining Operations Plan (MOP) in carrying out any significant surface disturbing activities, including mining operations, ancillary mining activities and prospecting. The lease holder must apply to the Minister for approval of a MOP. An approved MOP must be in place prior to commencing any significant surface disturbing activities, including mining operations, ancillary mining activities and prospecting.</p> <p>(b) The MOP must identify the post mining land use and set out a detailed rehabilitation strategy which:</p> <p>(i) identifies areas that will be disturbed;</p> <p>(ii) details the staging of specific mining operations, ancillary mining activities and prospecting;</p> <p>(iii) identifies how the mine will be managed and rehabilitated to achieve the post mining land use;</p> <p>(iv) identifies how mining operations, ancillary mining activities and prospecting will be carried out in order to prevent and or minimise harm to the environment; and</p> <p>(v) reflects the conditions of approval under:</p> <ul style="list-style-type: none"> <li>• the <i>Environmental Planning and Assessment Act 1979</i> ;</li> <li>• the <i>Protection of the Environment Operations Act 1997</i> ; and</li> <li>• any other approvals relevant to the development including the conditions of this mining lease.</li> </ul> <p>(c) The MOP must be prepared in accordance with the ESG3: Mining Operations Plan (MOP) Guidelines September 2013 published on the Department’s website.</p> <p>(d) The lease holder may apply to the Minister to amend an approved MOP at any time.</p> <p>(e) It is not a breach of this condition if:</p> <p>(i) the operations which, but for this condition 3(e) would be a breach of condition 3(a), were necessary to comply with a lawful order or direction given under the <i>Environmental Planning and Assessment Act 1979</i> , the <i>Protection of the Environment Operations Act 1997</i> , the <i>Work Health and Safety (Mines and Petroleum Sites) Act 2013</i> and Work Health and Safety (Mines and Petroleum Sites) Regulation 2014 or the <i>Work Health and Safety Act 2011</i> ; and Work Health and Safety Regulation 2017.</p> <p>(ii) the Minister had been notified in writing of the terms of the order or direction prior to the operations constituting the breach being carried out.</p>	<p>Approved Mining Operation Plans and Rehabilitation Management Plan.</p> <p>Approval letters from Resources Regulator.</p> <p>Rehabilitation Information Release - Resources Regulator (August 2021).  <a href="https://www.resourcesregulator.nsw.gov.au/sites/default/files/2021-08/RIR21-03-Geomorphic-landform-establishment-at-Mount-Pleasant-Operations.pdf">https://www.resourcesregulator.nsw.gov.au/sites/default/files/2021-08/RIR21-03-Geomorphic-landform-establishment-at-Mount-Pleasant-Operations.pdf</a></p>	<p>The RMP was reviewed and has satisfied the requirements of the condition. The RMP has been prepared in accordance with the Resources Regulator's <i>Form and Way – Rehabilitation Management Plan for Large Mines</i> (July 2021) which supersedes the <i>ESG3: Mining Operations Plan Guidelines</i> (September 2013).</p> <p>EMM sighted approval letters from the Resources Regulator that approve previous versions of the MOP.</p> <p>A Rehabilitation Information Release was prepared by the NSW Resources Regulator in August 2021. The release discusses the geomorphic landform establishment at MPO and includes information on the progress of rehabilitation at MPO including aerials figures and photos.</p>	Compliant	
	<p>(f) The lease holder must prepare a Rehabilitation Report to the satisfaction of the Minister. The report must:</p> <p>(i) provide a detailed review of the progress of rehabilitation against the performance measures and criteria established in the approved MOP;</p> <p>(ii) be submitted annually on the grant anniversary date (or at such other times as agreed by the Minister); and</p> <p>(iii) be prepared in accordance with any relevant annual reporting guidelines published on the Department’s website.</p> <p><i>Note: The Rehabilitation Report replaces the Annual Environmental Management Report.</i></p>	<p>Annual Reviews for 2020, 2021 and 2022.</p> <p>Annual rehabilitation report and forward program.</p>	<p>A review of the progress of rehabilitation is provided in section 7 of the Annual Reviews. A copy of the Annual Reviews are provided to the Resources Regulator and the DPE for approval. The 2020 and 2021 Annual review have both been approved by DPE. At the time of the audit, the 2022 Annual Review was submitted but not yet approved by DPE.</p> <p>MPO also prepare the annual rehabilitation report and forward program in accordance with <i>Form and Way – Annual Rehabilitation Report and Forward Program for Large Mines</i> (Resources Regulator 2021).</p>	Compliant	
Non-Compliance Reporting					
4	<p>(a) The lease holder must notify the Department upon becoming aware of any breaches of the conditions of this mining lease or breaches of the Mining Act or Regulations;</p> <p>(b) Notifications under condition 4(a) must be provided in the form specified on the Department’s website within seven (7) days of the mining lease holder becoming aware of the breach.</p>	N/A	There have been no breaches of the conditions of the mining leases or breaches of the Mining Act or Regulations.	Not triggered	
Environmental Incident Report					
5	The lease holder must provide environmental incident notifications and reports to the Secretary no later than seven (7) days after those environmental incident notifications and reports are provided to the relevant authorities under the <i>Protection of the Environment Operations Act 1997</i> .	<p>2020 Annual Review = 1 reportable incident:</p> <ul style="list-style-type: none"> <li>* 15/6/20 - blast fume event.</li> </ul> <p>2021 Annual Review = 9 reportable incidents:</p> <ul style="list-style-type: none"> <li>* 21/1/21 - MOD 4 out of hours construction works.</li> <li>* 8/3/21 - Water discharge event.</li> <li>* 31/3/21 - MOD 4 out of hours construction works.</li> <li>* 9/6/21 - Water discharge event.</li> <li>* 11/6/21 - Elevated EC levels at surface water site W17 on three consecutive monitoring rounds.</li> <li>* 27/8/21 - Noise exceedance.</li> <li>* 12/11/21 - Water discharge event.</li> <li>* 8/12/21 - Water discharge event.</li> <li>* 9/12/21 - Water discharge event.</li> </ul> <p>2022 Annual Review = 5 reportable incidents:</p> <ul style="list-style-type: none"> <li>* 8/3/22 - Water discharge event.</li> <li>* 6/5/22 - Spontaneous combustion event</li> <li>* 2/9/22 - Blast overpressure exceedance.</li> <li>* 21/10/22 - Water discharge event.</li> </ul>	EMM sighted evidence of submission via the portal and written notification of the incidents to DPE with in 7 days of becoming aware of the incident.	Compliant	
Extraction Plan					
6	<p>(a) In this condition</p> <p>(i) approved Extraction Plan means a plan, being:</p> <ul style="list-style-type: none"> <li>• an extraction plan or subsidence management plan approved in accordance with the conditions of a relevant development consent and provided to the Secretary; or</li> <li>• a subsidence management plan relating to the mining operations subject to this lease: <ul style="list-style-type: none"> <li>o submitted to the Secretary on or before 31 December 2014; and</li> <li>o approved by the Secretary.</li> </ul> </li> </ul> <p>(ii) relevant development consent means a development consent or project approval issued under the <i>Environmental Planning and Assessment Act 1979</i> relating to the mining operations subject to this lease.</p> <p>(b) The lease holder must not undertake any underground mining operations that may cause subsidence except in accordance with an approved Extraction Plan.</p> <p>(c) The lease holder must ensure that the approved Extraction Plan provides for the effective management of risks associated with any subsidence resulting from mining operations carried out under this lease.</p> <p>(d) The lease holder must notify the Secretary within 48 hours of any:</p> <p>(i) incident caused by subsidence which has a potential to expose any person to health and safety risks;</p> <p>(ii) significant deviation from the predicted nature, magnitude, distribution, timing and duration of subsidence effects, and of the potential impacts and consequences of those deviations on built features and the health and safety of any person; or</p> <p>(iii) significant failure or malfunction of a monitoring device or risk control measure set out in the approved Extraction Plan addressing:</p> <ul style="list-style-type: none"> <li>• built features;</li> <li>• public safety; or</li> <li>• subsidence monitoring.</li> </ul>	N/A	There is no Extraction Plan in place for MPO as it is an open cut mine.	Not triggered	
Resource Recovery					
7	The lease holder must optimise recovery of the minerals that are the subject of this mining lease to the extent economically feasible.	Annual Reviews for 2020, 2021 and 2022. Rehabilitation management plan.	This condition is deemed complaint based on the resource recovery reported in the Annual Reviews.	Compliant	
Group Security					
8	<p>The lease holder is required to provide and maintain a security deposit to secure funding for the fulfilment of obligations of all or any kind under the mining leases including obligations of all or any kind under the mining lease that may arise in the future.</p> <p>The amount of the security deposit to be provided as a group security has been assessed by the Minister at \$52,073,000.</p> <p>The leases covered by the group security include:</p> <p>Mining Lease 1645, 1708, 1709, 1713 &amp; 1750 (Act 1992)</p>	Letter from DPE dated 4/11/22 confirming security deposit following review.	The condition is determined as being compliant following review of the letter provided by MPO.	Compliant	
Cooperation Agreement					

9	<p>The lease holder must make every reasonable attempt, and be able to demonstrate its attempts, to enter into a cooperation agreement with the holder(s) of any overlapping title(s). The cooperation agreement should address but not be limited to issues such as:</p> <ul style="list-style-type: none"><li>• access arrangements</li><li>• operational interaction procedures</li><li>• dispute resolution</li><li>• information exchange</li><li>• well location</li><li>• timing of drilling</li><li>• potential resource extraction conflicts; and</li><li>• rehabilitation issues.</li></ul>	N/A	No overlapping tenures identified.	Not triggered	
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# Appendix B

## Planning Secretary Audit Team Agreement

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Department of Planning and Environment

Thomas Frankham  
Associate  
EMM Consulting  
Awabakal Country  
Level 3 175 Scott Street  
Newcastle NSW 2302

20/01/2023

Dear Mr Frankham

**Mt Pleasant Coal (DA92/97) - Proposed Independent Audit Team**

I refer to your request (DA92/97-PA-88) for the Secretary's approval of suitably qualified persons to prepare the 2022 Independent Environmental Audit (IEA) for the Mt Pleasant Operation (MPO) in accordance with Schedule 5 Condition 9 of development consent DA 92/97 as modified (the consent).

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 Secretary approves the appointment of EMM Consulting Pty Limited to prepare the IEA.

In accordance with Schedule 5 Condition 9 of the approval, and the Independent Audit Guidelines (2015), the Secretary has agreed to the following audit team:

- Thomas Frankham, EMM Consulting - lead auditor
- Bret Jenkins, EMM Consulting – audit assistance
- Samantha Hayes, EMM Consulting – assisting auditor
- Mark Bridges, Bridges Acoustics – technical specialist in noise, blast and vibration
- Francine Manansala, EMM Consulting – technical specialist in air quality and greenhouse gas
- Scott Fishwick, EMM Consulting – technical specialist in air quality and greenhouse gas
- Nathan Garvey, EMM Consulting – biodiversity management and offsetting

Please ensure this correspondence is appended to the IEA Report.

The IEA must be prepared, undertaken and finalised in accordance with the relevant consent conditions and the departments Independent Audit Post Approval Requirements (2020). Failure to meet these requirements will require revision and resubmission.

I note that the Exemplar Global certification for Thomas Frankham will expire on 25 February 2023, and that this approval of the above audit team is conditional upon Thomas maintaining certification as a lead or principal auditor with a relevant industry body.

Should you wish to discuss the matter further, please contact Jennifer Sage, Senior Compliance Officer on 0400 245 170 or [compliance@planning.nsw.gov.au](mailto:compliance@planning.nsw.gov.au)

Yours sincerely



Heidi Watters  
Team Leader Northern  
Compliance

As nominee of the Planning Secretary





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# Appendix C

## Consultation

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## C.1 Department of Planning and Environment

**From:** [no-reply@majorprojects.planning.nsw.gov.au](mailto:no-reply@majorprojects.planning.nsw.gov.au) <[no-reply@majorprojects.planning.nsw.gov.au](mailto:no-reply@majorprojects.planning.nsw.gov.au)>  
**Sent:** Tuesday, February 21, 2023 2:33 PM  
**To:** Mariah Lane <[Mariah.Lane@machenergy.com.au](mailto:Mariah.Lane@machenergy.com.au)>  
**Cc:** Mariah Lane <[Mariah.Lane@machenergy.com.au](mailto:Mariah.Lane@machenergy.com.au)>  
**Subject:** Communication regarding IEA consultation - February 2023 DA92/97-PA-90

Dear Mariah ,

I refer to your correspondence dated 20 February 2023 requesting:

1. Confirmation of parties or agencies to be consulted for the upcoming Independent Environmental Audit (IEA)
2. Areas of compliance or environmental management for a particular focus within the scope of the IEA

The department's responses to the above queries are provided below.

1. The auditor should consult with the following parties or agencies in the development of the IEA scope:

- NSW Department of Regional NSW, Mining, Exploration and Geoscience
- NSW Department of Planning and Environment, Biodiversity Conservation Division
- NSW Department of Planning and Environment, Water Division
- NSW Environment Protection Authority
- NSW Resources Regulator
- Muswellbrook Shire Council
- Community Consultative Committee

2. The department requests that in addition to the requirements of Schedule 5 condition 9 of development consent DA92/97 and the Independent Audit Post Approval Requirements 2020, the following areas of environmental management for a particular focus within the scope of the IEA:

- Greenhouse Gas Emissions
  - o A comparison of the actual annual greenhouse gas emissions generated during the audit period against the predictions in the environmental assessment
  - o An assessment of the adequacy of the measures employed by the site during the audit period to reduce greenhouse gas emissions
- Noise Management
  - o Adequacy of noise monitoring locations and mitigation measures
- Surface Water Management
  - o Adequacy of measures undertaken to minimise the occurrence and impact of unplanned dirty water discharge

Regards  
Heidi Watters  
Team Leader – Compliance  
Development Assessment  
Department of Planning and Environment

To sign in to your account click [here](#) or visit the [www.planningportal.nsw.gov.au/major-projects/projects](http://www.planningportal.nsw.gov.au/major-projects/projects) Major Projects Website.

Please do not reply to this email.

Kind regards

The Department of Planning and Environment



## C.2 Biodiversity Conservation Division

**From:** Robert Gibson <[Robert.Gibson@environment.nsw.gov.au](mailto:Robert.Gibson@environment.nsw.gov.au)>

**Sent:** Thursday, 9 March 2023 2:25 PM

**To:** Thomas Frankham <[tfrankham@emmconsulting.com.au](mailto:tfrankham@emmconsulting.com.au)>

**Cc:** Steven Crick <[Steven.Crick@environment.nsw.gov.au](mailto:Steven.Crick@environment.nsw.gov.au)>

**Subject:** RE: Mt Pleasant Operations independent environmental audit E220173 - Mt Pleasant IEA - BCD Consultation & input to the IEA

**CAUTION:** This email originated outside of the Organisation.

Dear Thomas,

Thank you for your e-mail dated 1 March 2023 in which EMM invited the Biodiversity and Conservation Division (BCD) of the Department of Planning and Environment for input into the upcoming MACH Energy – Mt Pleasant Operations independent environmental audit.

BCD has reviewed the conditions of consent for the project and the Annual Reviews from 2020 and 2021 and recommends that, in addition to the standard checks done as part of the Independent Environmental Audit (IEA) process that the next IEA includes the following:

- An assessment of what contingency measures are available to minimise impacts of actions under the current consent to *Delma vescolineata* animals and habitat, and recommended management actions for the 'Mount Pleasant Operation Biodiversity Management Plan' for when it is next revised. BCD notes that the current Biodiversity Management Plan is dated 31 October 2019 and that *Delma impar* was not considered for this project, but has since been found on site during the assessment for the adjacent Mount Pleasant Optimisation Project.
- An assessment of weed control works – is herbicide spraying and manual removal sufficient to control weed species 'to an appropriate level', particularly *Galenia pubescens*, Boxthorn, Mother of Millions, Prickly Pear and St Johns Wort which have been found on site (Section 5.5.2 of the 2020 and 2021 Annual Reviews). If not, what other weed control actions would EMM recommend? BCD notes that the establishment of such exotic species may hamper the realisation of some rehabilitation goals.

If you have any questions about this advice then please contact me on 4927 3154 or by e-mail at [huntercentralcoast@environment.nsw.gov.au](mailto:huntercentralcoast@environment.nsw.gov.au)

Yours sincerely,

Robert

**Robert Gibson**

**Senior Regional Biodiversity Conservation Officer, Hunter Central Coast Branch**

Biodiversity and Conservation Division | Department of Planning and Environment

T 02 4927 3154 | E [robert.gibson@environment.nsw.gov.au](mailto:robert.gibson@environment.nsw.gov.au)

6 Stewart Avenue NEWCASTLE NSW 2300

Locked Bag 1002 DANGAR NSW 2309

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

C.3 DPE Water

Automatic reply: E220173 - Mt Pleasant IEA - DPE Water Consultation



DPIE Water Enquiries Mailbox <water.enquiries@dpie.nsw.gov.au>  
To Thomas Frankham

Reply

Reply All

Forward

Wed 1/03/2023 3:53 PM

If there are problems with how this message is displayed, click here to view it in a web browser.

**CAUTION: This email originated outside of the Organisation.**

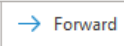
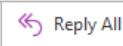
Thank you for your email. Your enquiry is important to us.  
We aim to respond to enquiries within 5 business days.  
If you need to follow up your enquiry, please call us on 1300 081 047.  
For urgent matters relating to water leaks or sewage, please contact your local council or your water provider.

## C.4 Environment Protection Authority

Thank you for your email. Your Reference Id is 01107899 (ref:\_00D7F6iTix.\_5007F1McqQo:ref)



Environment Line <info@environment.nsw.gov.au>  
To Thomas Frankham



Wed 1/03/2023 3:52 PM

If there are problems with how this message is displayed, click here to view it in a web browser.

CAUTION: This email originated outside of the Organisation.



Planning,  
Industry &  
Environment



Thank you for your enquiry. Environment Line will process your request within 5 working days. If your matter is urgent, please call Environment Line on 131555. For enquiries or requests that are more involved or technical, a longer response time may be necessary. If you have not already visited our websites and wish to do so, please go to [www.environment.nsw.gov.au](http://www.environment.nsw.gov.au) or [www.epa.nsw.gov.au](http://www.epa.nsw.gov.au)

**If you are emailing to report an urgent pollution incident, please call 131 555 (press option 1).**

Where the EPA or DPE is not the appropriate authority to manage your report, it will be forwarded to the appropriate authority. For example, commercial noise complaints for smaller factories, backyard workshops, smoke from residential backyard fires or chimneys or dumping in public areas are the responsibility of Local Councils; loud music or patron noise from public venues are the responsibility of Liquor & Gaming NSW, rubbish on major roads and highways is the responsibility of Transport for NSW. Any information provided regarding this type of pollution will be forwarded to those authorities for action.

If you do not consent to your report being forwarded, please reply to this email to advise that you would like to 'opt out' of any further action. You may also request that your details remain anonymous or confidential, however in certain circumstances this may limit our ability to deal with any complaint further. Details of our Privacy information can be found [here](#).

When sending further emails about this topic (E220173 - Mt Pleasant IEA - BCD Consultation), please ensure the following extended Reference Id appears anywhere in the email subject or body:

ref:\_00D7F6iTix.\_5007F1McqQo:ref

## C.5 Department of Regional NSW – Mining, Exploration and Geoscience

FW: E220173 - Mt Pleasant IEA - MEG Consultation



Chris Berry <chris.berry@regional.nsw.gov.au> on behalf of  
To: Resources Regulator  
Cc: Thomas Frankham



Reply

Reply All

Forward



Thu 2/03/2023 7:45 AM



E220173 - Mt Pleasant IEA\_Consult\_MEG.pdf  
.pdf File

**CAUTION: This email originated outside of the Organisation.**

Hi team Resources Regulator,

Please see request below from Thomas Frankham for comment from MEG regarding the Mount Pleasant independent environmental audit. Specifically this request seeks comment from MEG regarding compliance with mining leases and environmental performance.

As this topic sits entirely within the remit of the Resources Regulator I will pass this one on to you to review and respond to Thomas accordingly.

Thanks in advance,

**Chris Berry**  
**Senior Project Officer**

Mining, Exploration and Geoscience | Regional NSW  
T 02 4063 6600 | E [titles@regional.nsw.gov.au](mailto:titles@regional.nsw.gov.au)  
516 High Street, Maitland NSW 2320  
[regional.nsw.gov.au/meg](http://regional.nsw.gov.au/meg)



**Regional  
NSW**

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

## C.6 Muswellbrook Shire Council

RE: E220173 - Mt Pleasant IEA - MSC Consultation

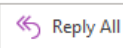


Theresa Folpp <Theresa.Folpp@muswellb

To Thomas Frankham

Cc Sharon Pope; Bret Jenkins; Samantha Hayes

Follow up. Start by Tuesday, 28 March 2023. Due by Tuesday, 28 March 2023.



Thu 16/03/2023 9:05 AM

**CAUTION: This email originated outside of the Organisation.**

Hi Thomas,

Thank you for your email.

Comments are as follows, could the IEA please address the following:

- 1) Consider inclusion of "Risk Levels for Non-Compliances" in accordance with DPE's IEA Guidelines (2015)? This makes it easier for the community to interpret the outcomes of the IEA;
- 2) Provide a review and summary of the process for temporary rehabilitation for areas that are not going to be rehabilitated for some time (assumed to be six months);
- 3) DA 92/97 does not include the requirement to prepare a Historic Heritage Management Plan (other than for MOD4 construction works). However, the MTP EIS (1997) for DA 92/97 lists the following items to be impacted by blasting:
  - o Rosedale Cottage, Kayuga;
  - o Negroa Homestead;
  - o Old Cemetery, Kayuga;
  - o Kayuga 1827 homestead;
  - o Bengalla homestead;
  - o Overdene homestead.

Section 10.5.2 of the EIS states that the following safeguards will be used to protect impacted items:

- Surveying buildings to assess their condition and ability to withstand expected maximum levels of vibration and overpressure;
- Subject to the above, temporary reinforcement of buildings to minimise damage induced by blasting;
- Regular monitoring; and
- Restoration of damage once impacts are within accepted standards.

Please provide commentary on works being undertaken to address the above.

- 4) Review the adequacy of the automated dust suppression spray systems at the ROM hopper, conveyor transfer points and product stockpiles;
- 5) Clarify if there has been anytime when there has been no access to the meteorological data or PM10 data from the Muswellbrook NW Upper Hunter Air Quality Monitoring Network monitoring station. If so, clarify the frequency; and
- 6) Section 10.3.9 of the EIS (1997) proposes the following: "monitoring of demand for temporary accommodation". Please confirm whether MACH Energy are monitoring the demand for temporary accommodation.

Regards,  
Theresa



**Muswellbrook Shire Council | Theresa Folpp | Development Compliance Officer | Administration Building**

**T:** (02) 6549 3700 | **E:** [Theresa.Folpp@muswellbrook.nsw.gov.au](mailto:Theresa.Folpp@muswellbrook.nsw.gov.au) | **W:** [www.muswellbrook.nsw.gov.au](http://www.muswellbrook.nsw.gov.au)





AREQ0037866

Mr Tom Frankham  
EMM Consulting  
Level 3, 175 Scott Street  
Newcastle NSW 2300  
By email: [tfrankham@emmconsulting.com.au](mailto:tfrankham@emmconsulting.com.au)

Dear Mr Frankham,

**Subject: Mount Pleasant Coal Mine – Independent Environmental Audit**

Thank you for your email and letter dated 1 March 2023 requesting consultation on the independent environmental audit to be undertaken of the Mount Pleasant Coal Mine which is covered by the following mining leases.

- ML1645 (1992)
- ML1708 (1992)
- ML1709 (1992)
- ML1713 (1992)
- ML1750 (1992)
- ML1808 (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 six mining leases that comprise Mount Pleasant Coal 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](mailto:nswresourcesregulator@service-now.com) upon completion of the audit.

Yours sincerely

**Jenny Ehmsen**  
Principal Compliance Auditor  
3 March 2023

**NSW Resources Regulator**  
516 High Street Maitland NSW 2320 | PO Box 344 HRMC NSW 2310 | Tel: 1300 814 609 |  
[resourcesregulator.nsw.gov.au](http://resourcesregulator.nsw.gov.au)

## C.8 Community Consultative Committee

**From:** William Paradise <[w.paradice@icloud.com](mailto:w.paradice@icloud.com)>  
**Sent:** Sunday, 5 March 2023 5:48 PM  
**To:** Thomas Frankham <[tfrankham@emmconsulting.com.au](mailto:tfrankham@emmconsulting.com.au)>  
**Subject:** Fwd: MACH Energy Mount Pleasant Operation Independent Audit Consultation

CAUTION: This email originated outside of the Organisation.

Hi Thomas - back in communication - see message from Llewellyn, one of our CCC members.  
Regards  
Wej

Sent from my iPhone

Begin forwarded message:

**From:** Llewellyn Bates <[mllewates@activ8.net.au](mailto:mllewates@activ8.net.au)>  
**Date:** 5 March 2023 at 11:23:15 am AEDT  
**To:** William Paradise <[w.paradice@icloud.com](mailto:w.paradice@icloud.com)>  
**Subject:** MACH Energy Mount Pleasant Operation Independent Audit Consultation

Hello Wej,

Having read the letter from EMM, and with reference to paragraph 2 - I would like the Fines Emplacement Area to be of particular focus and included within the IEA scope.

Kind regards,  
Llewellyn

**From:** William Paradise <[w.paradice@icloud.com](mailto:w.paradice@icloud.com)>  
**Sent:** Wednesday, 22 February 2023 10:45 AM  
**To:** Thomas Frankham <[tfrankham@emmconsulting.com.au](mailto:tfrankham@emmconsulting.com.au)>  
**Subject:** Fwd: Mt Pleasant environment audit

CAUTION: This email originated outside of the Organisation.

Thomas  
As indicated in my previous email please find attached a comment from Tony Lonergan, a member of the CCC.  
Regards  
Wej Paradise  
Chair  
Mt Pleasant CCC

Sent from my iPad

Begin forwarded message:

**From:** anthony lonergan <[adlonergan@gmail.com](mailto:adlonergan@gmail.com)>  
**Date:** 22 February 2023 at 8:25:53 am AEDT  
**To:** William Paradise <[w.paradice@icloud.com](mailto:w.paradice@icloud.com)>  
**Subject:** Mt Pleasant environment audit

Hi Wej. I would like the auditors to look at a couple of issues

1. I don't know the numbers but there has been a significant increase in the number of air quality alerts since it has become dryer. I think it deserves a look in relation to Muswellbrook
  - 2 The erosion on the eastern emplacement area is not acceptable in my mind. The emplacement slope is very steep. On the CCC tour we were told it would be dealt with at some point, but has not been yet.
  - 3 Weed management on site and in the adjacent land needs to be better managed
- Thanks, Tony

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# Appendix D

## Independent Audit Declaration Form

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**Table D.1 Independent Audit Report Declaration Form**


<b>Project name</b>	Mount Pleasant Operation
<b>Consent number</b>	DA 92/97
<b>Description of project</b>	Construction and operation of the Mt Pleasant open cut coal mine and associated infrastructure
<b>Project address</b>	1100 Wybong Road, Muswellbrook NSW 2333
<b>Proponent</b>	MACH Energy Australia Pty Ltd
<b>Title of Audit</b>	Mount Pleasant Operations Independent Environmental Audit 2023
<b>Date</b>	5 May 2023

I declare 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. the audit has been undertaken in accordance with relevant condition(s) of consent and the *Independent Audit Compliance Requirements* (Department 2019)
- ii. the findings of the audit are reported truthfully, accurately and completely
- iii. I have exercised due diligence and professional judgement in conducting the audit
- iv. I have acted professionally, objectively and in an unbiased manner
- v. I am not related to any proponent, owner or operator of the project neither as an employer, business partner, employee, or by sharing a common employer, having a contractual arrangement outside the audit, or by relationship as spouse, partner, sibling, parent, or child
- vi. I do not have any pecuniary interest in the audited project, including where there is a reasonable likelihood or expectation of financial gain or loss to me or spouse, partner, sibling, parent, or child
- vii. neither I nor my employer have provided consultancy services for the audited project that were subject to this audit except as otherwise declared to the Department prior to the audit
- viii. I have not accepted, nor intend to accept any inducement, commission, gift or any other benefit (apart from payment for auditing services) from any proponent, owner or operator of the project, their employees or any interested party. I have not knowingly allowed, nor intend to allow my colleagues to do so.

Note.

- Under Section 10.6 of the *Environmental Planning and Assessment Act 1979* a person must not include false or misleading information (or provide information for inclusion in) a report of monitoring data or an audit report produced to the Minister in connection with an audit if the person knows that the information is false or misleading in a material respect. The proponent of an approved project must not fail to include information in (or provide information for inclusion in) a report of monitoring data or an audit report produced to the Minister in connection with an audit if the person knows that the information is materially relevant to the monitoring or audit. The maximum penalty is, in the case of a corporation, \$1 million and for an individual, \$250,000.
- The *Crimes Act 1900* contains other offences relating to false and misleading information: Section 307B (giving false or misleading information – maximum penalty 2 years imprisonment or 200 penalty units, or both).

<b>Name of Auditor</b>	Thomas Frankham
<b>Signature</b>	
<b>Qualification</b>	BEnvSc, Certified Lead Environmental Auditor (Exemplar Global - Certification No. 207528)
<b>Company</b>	EMM Consulting
<b>Company address</b>	Level 3, 175 Scott Street, Newcastle NSW 2300

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# Appendix E

## Technical Specialists Reports

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21 April 2023  
Ref: J0266-01-L2

EMM Consulting Pty Limited  
Level 3, 175 Scott Street  
NEWCASTLE NSW 2300

**Attn: Mr Thomas Frankham**

Dear Tom,

## **RE: MOUNT PLEASANT OPERATIONS - INDEPENDENT ENVIRONMENTAL AUDIT**

This report describes outcomes from a partial Independent Environmental Audit (IEA) of Mount Pleasant Operations (MPO) operated by Mach Energy Australia Pty Ltd (Mach Energy), with a focus on acoustics. This acoustic audit report was commissioned by EMM Consulting Pty Limited (EMM) to accompany and form part of a more complete IEA of MPO.

The acoustic audit was completed according to the Independent Audit, Post Approval Requirements (DPIE, 2022) and other requirements specified by EMM. The audit covers a three year period from 27 February 2020 to 8 March 2023.

### **AUDIT SCOPE**

The acoustic audit described in this report included:

- A desktop review of various documents including:
  - Development consent 92/97;
  - Environment Protection License (EPL) 20850;
  - Noise Management Plan;
  - Blast Management Plan;
  - Noise monitoring data for the audit period, presented in monitoring reports prepared by independent consultants and monthly monitoring reports and Annual Reviews prepared by Mach Energy;
  - Blast monitoring data for the audit period, presented as raw data reports by independent consultants and monthly monitoring reports and Annual Reviews prepared by Mach Energy; and
  - Various other reports supplied by Mach Energy as required to address DA or EPL conditions.
- Identification of any non-compliances and investigation of any noise and vibration incidents and issues;
- Review of compliance with any directives or directions from regulators;
- Recommendation of any changes or updates to management procedures or management plans where appropriate; and
- Preparation of a table of responses related to compliance with acoustic related DA and EPL conditions identified by EMM. Any recommendations or other audit outcomes were also included in the table of responses.

A site visit was not included in the scope of the acoustic audit. EMM audit personnel visited the site to obtain relevant data, inspect noise and blasting management practises and mitigation measures and obtain any additional required information.

## **COMPLIANCE WITH PROJECT APPROVAL AND ENVIRONMENT PROTECTION LICENCE CONDITIONS**

Outcomes from the acoustic audit indicated general compliance with DA 92/97 and EPL 20850 acoustic related conditions. The following sections present additional information regarding each non-compliance and recommendations regarding these conditions.

### **DA Schedule 3 Condition 3 Noise Criteria**

#### **EPL Condition L3.1 Noise Limits**

MPO generally complied with the noise limits specified in the DA and EPL at all monitoring locations and at all sensitive residential locations, with the following exceptions:

- 50 LA1,1min at monitoring location N-AT4 in April 2020, 5 LA1,1min over the criterion;
- 44 LAeq,15min and 51 LA1,1min at monitoring location N-AT3 in July 2020, 3 LAeq,15min and 6 LA1,1min over the criteria at this location;
- 56 LA1,1min at monitoring location N-AT4 in August 2021, 11 LA1,1min over the criterion; and
- 61 LA1,1min at monitoring location N-AT4 in November 2022, 16 LA1,1min over the criterion.

N-AT3 is located to the north-east and N-AT4 is located to the south-east. The easterly quadrant is therefore the most critical direction for MPO in relation to noise.

**Recommendation:** operations personnel to be more vigilant in relation to noise management, particularly during light winds from the western quadrant.

Other issues were noted while determining compliance with this condition, all related to the independent noise consultant's monitoring procedures and reports:

- Incorrect sound level meter calibration procedure. A Class 2 calibrator was used on a Class 1 sound level meter in all noise surveys, contrary to relevant standards;
- An invalid sound level meter calibration certificate, as it was issued after the date of the noise survey, was included in the January 2021 noise monitoring report; and
- Instrument calibration certificates were not included in the April 2022 noise monitoring report.

These additional issues do not imply the noise levels reported by the consultant include significant errors or inaccuracies.

**Recommendation:** annually review the noise monitoring consultant's procedures to ensure consistency with all relevant standards.

### **DA Schedule 3 Condition 44H Construction Noise**

The Construction Environmental Management Plan included an Out of Hours Work Protocol which incorrectly applied the approved daytime construction noise criteria to the evening and night periods. A construction noise survey in May 2021 included noise measurements at closest residences during the night, indicating noise levels up to 50 LAeq,15min. Monitoring reports concluded compliance with the incorrect night noise criteria. The construction work is now completed.

**Recommendation:** ensure an Out of Hours Work Protocol for any future construction work adopts the correct noise criteria, which are generally the Schedule 3 Condition 3 noise criteria for the evening and night periods unless alternative criteria are specifically approved.

### **EPL Condition L4.3 Blast Limits**

The EPL specifies blast monitoring locations and requires compliance with vibration and overpressure limits at those locations. Monitoring at location B-VOA, representing monitoring point 12 defined in the EPL at that time, indicated an overpressure level of 122.7 dBL on 2 September 2022 which exceeded the limit of 120 dBL. Blast monitoring at residences confirmed compliance with the criteria for this event.

Monitoring point 12, location B-VOA was not close to any residence therefore no residents were impacted by this event. The event was not an exceedance of the relevant conditions of DA92/97, which requires compliance with the blast criteria at residences and other sensitive locations rather than at defined monitoring points.

A subsequent revision of the EPL has removed the requirement to monitor blast impacts at this location, therefore no recommendations are required.

### **EPL Condition R5.2 Noise Compliance Report**

Condition R5.2 requires an annual report, prepared by a qualified acoustic consultant, to include monitoring data and other specified information and be submitted to the EPA. While the EPA has access to noise monitoring data in the monthly monitoring reports and Annual Reviews, those documents are not prepared by a qualified acoustic consultant and do not satisfy this condition.

**Recommendation:** commission a noise monitoring report annually to satisfy this condition.

## **REVIEW OF MANAGEMENT PLANS**

A detailed review of the Noise Management Plan (NMP) and Blast Management Plan (BMP) have not resulted in any significant recommendations for amendment or improvement. Issues arising during the audit period, such as noise monitoring location N-AT3 not being located close to sensitive residences and blast monitoring location B-VOA not representing sensitive receptors, have already been addressed by a revision to each management plan. The plans are considered comprehensive and complete.

Current noise and blast monitoring locations have been reviewed and adequately represent closest and potentially most affected residences and other sensitive locations. Noise and blast monitoring procedures have been reviewed and are considered appropriate.

## **OUTCOMES AND RECOMMENDATIONS FROM THE 2020 IEA**

There were no acoustic-related non-compliances or recommendations in the previous audit period.

## **COMMITMENTS**

Two acoustic-related commitments, related to preparation of an appropriate Noise Management Plan and control of train noise from the Mod 4 rail infrastructure, have been satisfactorily met.

## **REPORTING**

The acoustic audit included a comparison between the measured noise and blast levels from MPO in the consultant's noise and blast monitoring reports, the levels reported in the Monthly Environmental Monitoring Reports prepared by Mach Energy and the Annual Reviews also prepared by Mach Energy.



Some differences between the consultant's noise reports and the reported noise data in the monthly and annual reports prepared by Mach Energy were noted, generally due to transcription and/or copy/pasting errors.

**Recommendation:** additional care when preparing environmental monitoring reports and Annual Reviews to avoid transcription errors.

## CONCLUSION

This acoustic audit, as part of the larger Independent Environmental Audit completed by EMM, has indicated general compliance with acoustic related DA and EPL conditions with occasional exceptions.

Significant non-compliances with acoustic conditions in DA 92/97 and EPL 20850 relate to occasional noise levels over relevant criteria at monitoring locations north-east and south-east of MPO and night construction work on rail infrastructure that was not assessed to the correct night noise criteria and would have exceeded the correct night criteria at closest residences.

Less significant non-compliances with acoustic conditions, in that no acoustic impact occurred to any residence or other sensitive location as a result of these non-compliances, relate to a blast overpressure level measured at a location that does not represent a sensitive location, failure to prepare and submit all required compliance reports to the EPA and failure of the noise monitoring consultant to implement and document instrument calibration procedures in relevant standards.

Management plans, including key issues such as noise and blast monitoring locations, are appropriate and consistent with current best practise. Previous acoustic related commitments have been met.

Overall, MPO has been operated and managed in a competent manner from an acoustic perspective. Increased vigilance in implementing noise management measures, particularly during light winds from the western quadrant which is believed to be the main cause of noise criteria exceedances during the audit period, has been recommended to reduce the risk of noise criteria exceedances in the next few years.

Yours faithfully,

## BRIDGES ACOUSTICS



**MARK BRIDGES BE (Mech) (Hons) MAAS**  
**Principal Consultant**

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# Appendix F

## Site Inspection Photographs

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Photograph F.1      Active mining area



Photograph F.2      Active mining area



Photograph F.3      Active mining area



Photograph F.4      Active mining area





Photograph F.5 Highwall at active mining area



Photograph F.6 Highwall at active mining area



Photograph F.7 Active mining area





Photograph F.8 Dust in active mining area



Photograph F.9 Dust in active mining area



Photograph F.10 Steel recycling signage



Photograph F.11 Steel recycling





Photograph F.12 Timber recycling signage



Photograph F.13 Timber recycling



Photograph F.14 General waste



Photograph F.15 General waste signage





Photograph F.16 Laydown area



Photograph F.17 Inactive mining area



Photograph F.18 Inactive mining area



Photograph F.19 Inactive mining area





Photograph F.20

Inactive mining area



Photograph F.21

Pump SD3



Photograph F.22

Inactive mining area





Photograph F.23 SD3



Photograph F.24 New rehabilitation behind ED2



Photograph F.25 SD3



Photograph F.26 Rehabilitation





Photograph F.27 SD3



Photograph F.28 Eastern out of pit emplacement area



Photograph F.29 Surface water drainage to SD3





Photograph F.30      Surface water drainage on eastern out of pit emplacement area



Photograph F.31      Surface water drainage on eastern out of pit emplacement area



Photograph F.32      Erosion and sediment run off trial



Photograph F.33      SD1





Photograph F.34 Meteorology station



Photograph F.35 Meteorology station



Photograph F.36 Water pump infrastructure





Photograph F.37 Stage 1 rail corridor



Photograph F.38 Aboriginal heritage item site



Photograph F.39 Aboriginal heritage item site





Photograph F.40 Fines emplacement area



Photograph F.41 Fines emplacement area



Photograph F.42 Fines emplacement area



Photograph F.43 Fines emplacement area





Photograph F.44 Fines emplacement area



Photograph F.45 Fines emplacement area



Photograph F.46 Erosion fencing



Photograph F.47 Fines emplacement area





Photograph F.48

Fines emplacement area



Photograph F.49

Fines emplacement area



Photograph F.50

Fines emplacement area





Photograph F.51      Erosion



Photograph F.52      Erosion fencing



Photograph F.53      ED2





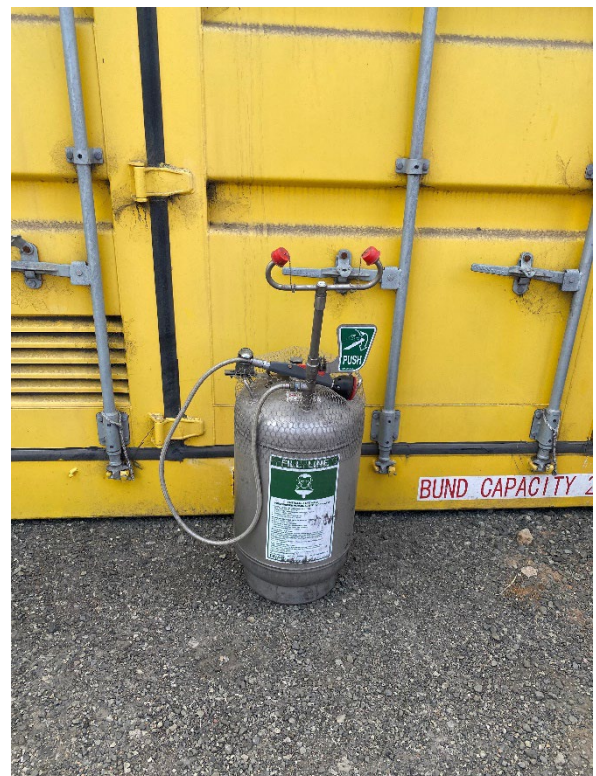
Photograph F.54 Safety signage



Photograph F.55 Spill kit and fire extinguisher



Photograph F.56 Oil and fuel spill kit



Photograph F.57 Emergency eye wash





Photograph F.58 Hydraulic oil storage



Photograph F.59 Hydraulic oil storage



Photograph F.60 Hoses in oil storage area



Photograph F.61 CHPP area





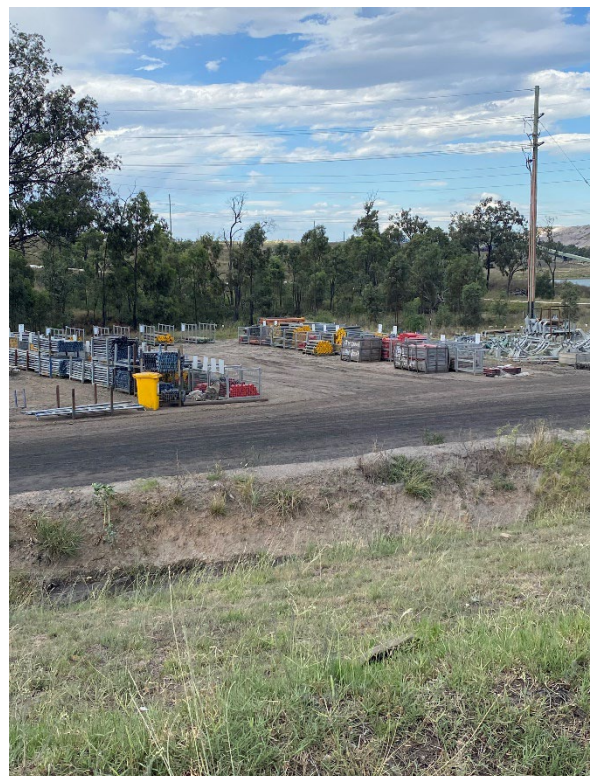
Photograph F.62 SDS



Photograph F.63 Unbundled chemicals/hydrocarbons



Photograph F.64 Unbundled chemicals/hydrocarbons



Photograph F.65 Laydown area





Photograph F.66 Laydown area



Photograph F.67 Laydown area



Photograph F.68 Laydown area



Photograph F.69 CHPP





Photograph F.70 Coal conveyor



Photograph F.71 Coal conveyor



Photograph F.72 Coal conveyor



Photograph F.73 Sediment dam (CHPP area)

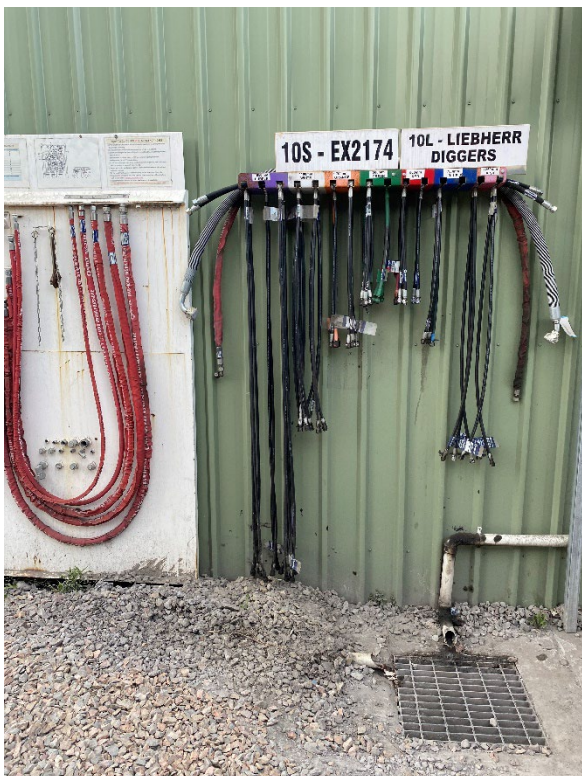




Photograph F.74 Sediment dam (CHPP area)



Photograph F.75 Sediment dam (CHPP area)

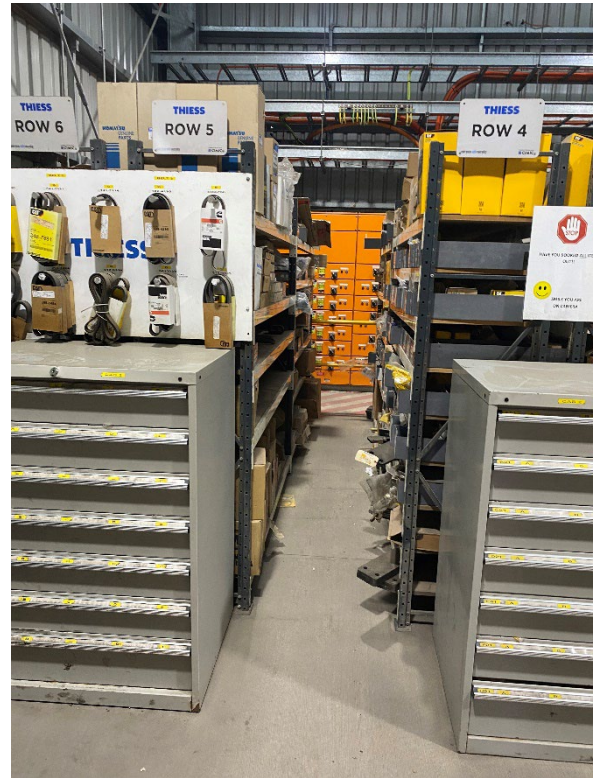


Photograph F.76 Mine infrastructure area



Photograph F.77 Mine infrastructure area









Photograph F.82 Spill kits and waste storage



Photograph F.83 Mine infrastructure area

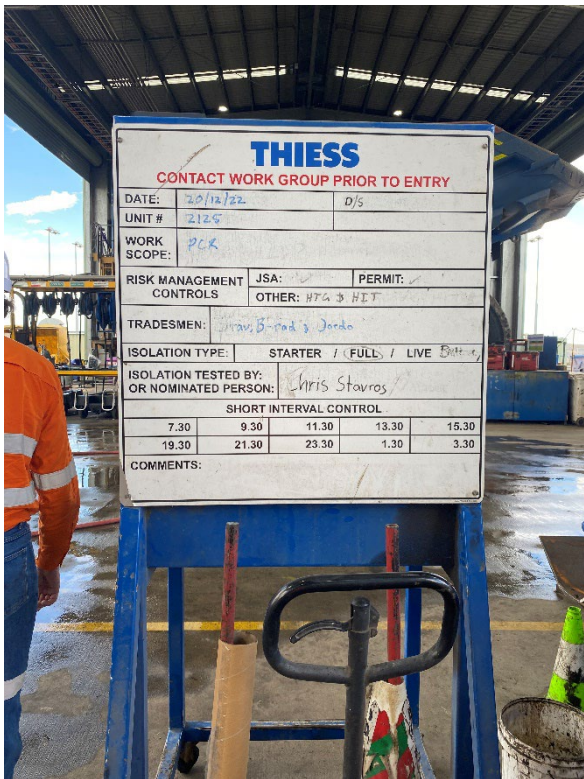


Photograph F.84 Waste storage



Photograph F.85 Mine infrastructure area





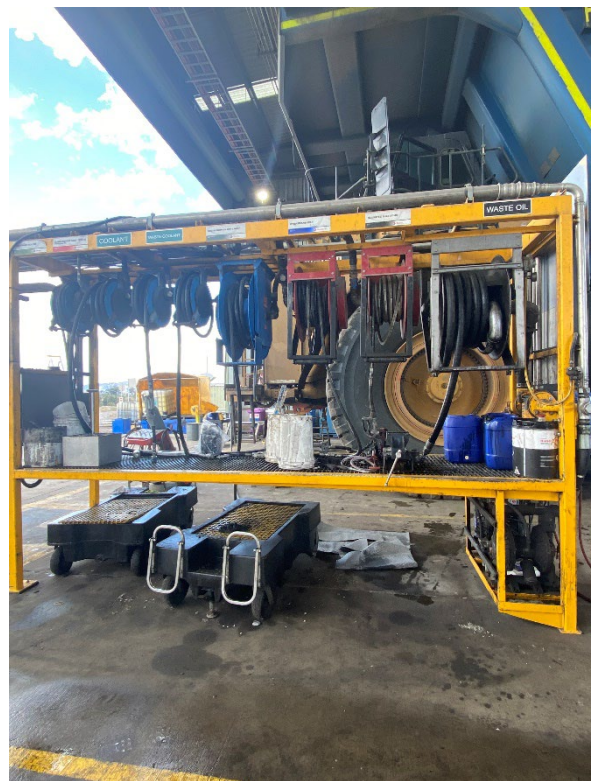
Photograph F.86 Mine infrastructure area



Photograph F.87 Waste storage



Photograph F.88 Unbundled chemicals/hydrocarbon



Photograph F.89 Mine infrastructure area





Photograph F.90 Mine infrastructure area



Photograph F.91 Mine infrastructure area



Photograph F.92 Mine infrastructure area



Photograph F.93 Mine infrastructure area





Photograph F.94 Hydraulic hose waste signage



Photograph F.95 Hydraulic hose waste

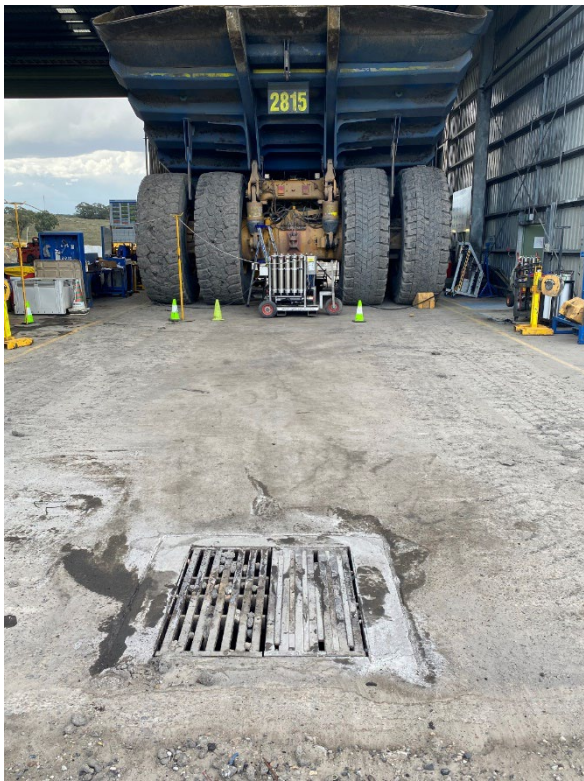


Photograph F.96 Mine infrastructure area



Photograph F.97 Waste storage





Photograph F.98

Mine infrastructure area



Photograph F.99

Mine infrastructure area



Photograph F.100

Mine infrastructure area



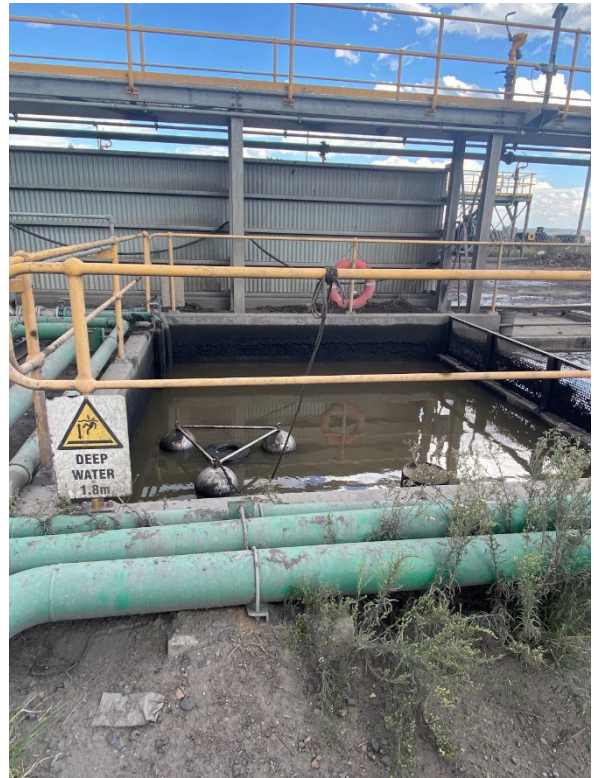
Photograph F.101

Mine infrastructure area





Photograph F.102 Oily water separator



Photograph F.103 Oily water separator



Photograph F.104 Oily water separator



Photograph F.105 Water management system





Photograph F.106 Mine infrastructure area



Photograph F.107 Mine infrastructure area



Photograph F.108 Laydown area



Photograph F.109 Laydown area





Photograph F.110 Empty chemical containers for recycling



Photograph F.111 Empty chemical containers for recycling



Photograph F.112 Rubbish



Photograph F.113 Laydown area





Photograph F.114 Rubbish



Photograph F.115 Laydown area



Photograph F.116 Chemical storage



Photograph F.117 Chemical storage





Photograph F.118 Gas storage



Photograph F.119 Mine infrastructure area



Photograph F.120 Mine infrastructure area



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## Summary of Independent Environmental Audit Recommendations and MACH Energy Responses

Item No.	Audit Recommendation	MACH Energy Response	Forecast Completion
<b>Development Consent DA 92/97</b>			
S3 C 3	<b>REC 1:</b> A Class 1 calibrator must be used with a Class 1 sound level meter for noise monitoring. Ensure all calibration certificates are included in consultants reports.	MACH Energy acknowledges the recommendation and notes that calibration of monitoring equipment is undertaken in accordance with relevant operating manuals and applicable Australian Standards. MPO will ensure all calibration certificates are included in consultants reports.	n/a
S3 C 18	<b>REC 2:</b> Complaints registers and Annual Reviews should be consistent in stating odour complaints (e.g. 2022 Annual Review mentions 3 odour complaints but these are not listed as 'odour' in the 2022 complaints register but rather, refer to spontaneous combustion and the 'nature of complaint' is 'other').	This recommendation will be addressed in future complaints register reports by aligning complaints to categories used in Annual Reports.	n/a
S3 C 18	<b>REC 3:</b> MACH Energy should ensure that odour and fume management conditions per Section 9.5 of the AQGHGMP are reviewed for effectiveness, updated where necessary and are being implemented effectively following staff education and training.	This recommendation will be addressed in future revisions of the AQGHGMP.	n/a
S3 C 24	<b>REC 4:</b> MACH Energy should ensure that temperature lapse data is collected, stored and presented for audit purposes.	MACH Energy acknowledges this recommendation and will alter recording processes for temperature lapse data to ensure its appropriately collected, stored and presented.	n/a
S3 C 26	<b>REC 5:</b> Ensure corrective actions as per the investigations of incident events are implemented.	<p>The MPO Site Water Balance Model is currently being updated and calibrated based on real-time weather observations and recorded water storage volumes. The updated model will provide great accuracy in water management requirements across the site. The updated model will be completed in May 2023.</p> <p>Works to sediment dams 6 and 7 within the new rail corridor have been completed to increase storage and pumping capacity. Improvement have also been completed along Wybong Road corridor to ensure the clean water is diverted away from mining operations and avoid overwhelming sediment dams on site.</p>	<p>May 2023</p> <p>Complete</p>

Item No.	Audit Recommendation	MACH Energy Response	Forecast Completion
		MACH Energy have begun construction for a temporary discharge line to discharge water from site to the Hunter River as part of the Hunter Rivers Salinity Trading Scheme (HRSTS). This project is set for completion in May 2023.	May 2023
S3 C 32	<b>REC 6:</b> It was noted during the site visit that weed management activities had fallen behind over the past 12 months due to difficulties in engaging contractors. This is a known issue. Thiess have appointed a full-time contractor and are hoping to undertake additional work to get weed management back on track.	MACH Energy have engaged a full time weed management resource through the mining service provider Thiess. This includes a full-time contractor and vehicle equipped with spray unit to address weeds within the operations and rehabilitation areas.	Complete
S3 C 44H	<b>REC 7:</b> Adopt appropriate noise criteria for any out-of-hours construction work. Appropriate criteria are generally identical to usual MPO noise criteria unless alternative criteria are agreed with EPA/DPE	All construction works associated with MOD 4 have now been completed. Any requirements to complete out-of-hours-work will be reviewed as required in accordance with Mt Pleasant Operation Out-Of-Hours-Works Protocol.	Complete
S3 C 52	<b>REC 8:</b> Ensure all chemicals/hydrocarbons are appropriately stored in bunded areas.	MACH Energy have commissioned a capital expenditure project to upgrade the MIA infrastructure. The new design will address issues with chemical and hydrocarbon storage by increasing bunded storage areas.	Mid-2024
S3 C 54	<b>REC 9:</b> Update Table 2-1 of the RMP to include Schedule 3, Condition 54 of DA 92/97.	This recommendation will be addressed in future revisions of the RMP. Updates will be made to table 2.1 to include reference to Schedule 3, Condition 54.	December 2023
	<b>REC 10:</b> Update RMP to make reference to the Annual Rehabilitation and Forward Work Program to address the requirement of the RMP to an include indicative schedule.	This recommendation will be addressed in future revisions of the RMP.	December 2023
S3 C 54	<b>REC 11:</b> Address erosion issues within the rehabilitation areas which were observed during the site visit.	MACH Energy have awarded a contract to complete a sitewide civil and earthworks project to address areas of erosion. This scope is scheduled for completion in 2023.	December 2023
<b>Environmental Protection Licence EPL 20850</b>			
P1.2	<b>REC 12:</b> Show EPL Point 14 and 15 on a figure in Water Management Plan	EPL Points 14 and 15 will be included in a figure during next revision of the MPO Water Management Plan to indicate monitoring locations.	December 2023



Item No.	Audit Recommendation	MACH Energy Response	Forecast Completion
L 3.1	<b>REC 13:</b> Implement diligent noise management practises to avoid exceedances of the noise criteria.	MACH Energy will implement additional mobile noise monitors to further assess noise levels throughout MPO's Noise Assessment Groups. A real time noise assessment tool is implemented at MPO. Weekly review of all noise alarms by a specialist noise consultant is undertaken to identify noise emanating from MPO. MPO implements three additional attended noise monitoring events following an exceedance of noise criteria. MPO utilises this information to further interrogate noise sources and avoid exceedances of the noise criteria.	December 2023
L 4.3	<b>REC 14:</b> Ensure the blast monitoring locations are regularly reviewed and represent closest privately owned receivers.	A variation of EPL Licence 20850 was received on the 28 <sup>th</sup> February 2023. This variation included the removal of Monitoring Point 12 (B-VOA) as no residences are located near this monitor.	Complete
L 4.6	<b>REC 15:</b> Review measures in the Blast Management Plan and the AQGHGMP for effectiveness and ensure these are being implemented on site.	This recommendation will be addressed in future revisions of the BMP and AQGHGMP.	December 2023
L 5.1	<b>REC 2:</b> Complaints registers and annual reports should be consistent in stating odour complaints (e.g. 2022 Annual Report mentions 3 odour complaints but these are not listed as 'odour' in the 2022 complaints register but rather, refer to spontaneous combustion and the 'nature of complaint' is 'other').	This recommendation will be addressed in future complaints register reports by aligning complaints to categories used in Annual Reports.	Complete
	<b>REC 16:</b> Use 'Consultation Manager' internal system to track all complaints and manage follow up.	'Consultation Manager' is currently under review to increase efficiency in tracking complaints and follow up measures.	August 2023
O 1.1	<b>REC 8:</b> Ensure all chemicals/hydrocarbons are appropriately stored in bunded areas.	MACH Energy have commissioned a capital expenditure project to upgrade the MIA infrastructure. The new design will address issues with chemical and hydrocarbon storage by increasing bunded storage areas.	Mid- 2024
O 3.1–3.3, 3.9	<b>REC 17:</b> Site personnel to ensure that water sprays on materials/when loading or unloading materials are being applied per the AQGHGMP to minimise dust during tipping as far as possible. The measures in the AQGHGMP relating to this should be reviewed for effectiveness	At the time of the observation, wheel generated dust emissions were not considered excessive. However, the observed emissions were in the 'Dust emissions are increasing, and operators should consider if further action to reduce dust is required' category, as per EPA's Dust Assessment Handbook.  It is noted that the Dust Assessment Handbook includes a number of factors to consider when assessing if operational changes to haul roads are required, namely; weather conditions, location, proximity to site boundary, proximity to sensitive receptors, duration of emissions and occupational safety.	Complete

Item No.	Audit Recommendation	MACH Energy Response	Forecast Completion
		<p>The operations were within the pit and a significant distance from the site boundary and sensitive receptors. Light winds were present, generally from the south-west (i.e. not towards key closest receptors). As such, in-pit dust emissions would be considered unlikely to lead to off-site impacts.</p> <p>Further, no real time dust alarms were triggered at the time of the observations.</p> <p>Notwithstanding, the operational team instructed water carts to carry out dust suppression throughout the pit.</p> <p>The daily dust risk forecast is provided to the Open Cut Examiner via email each morning to assist with operational planning and to inform the operations team of the dust risk for the day. Supervisors, OCEs, and the environment team also conduct regular checks on dust levels throughout MPO, and operators are proactive in responding to and communicating elevating dust levels.</p> <p>Mount Pleasant Operation has multiple cameras within site, including those that cover the mining and coal handling prep plant area.</p> <p>MACH Energy have commissioned modifications to the ROM Bin opening to improve dust capture and suppression. Modifications include extending the opening structure to deploy additional spray bars. The structure will also suspend rubber belting from the roof to reduce the gap from a loaded truck. This structure has been erected with final completion scheduled for August 2023.</p>	August 2023
O5	<b>REC 18:</b> MPO to test PIRMP at least once prior to January 2024 and annually thereafter.	The PIRMP is scheduled to be tested in December 2023 and annually thereafter.	December 2023
O6.1	<b>REC 19:</b> Include the waste management requirements of EPL 20850 Condition O6.1 in the Thiess Mount Pleasant Handling and Disposal of Waste Procedure.	This recommendation will be addressed with the next revision of the Thiess Mount Pleasant Handling and Disposal of Waste Procedure.	June 2023
M2.3	<b>REC 20:</b> Complete quarterly faecal and pH monitoring in line with the obligations of the EPL Condition M2.3.	<p>Quarterly faecal and pH monitoring is scheduled to occur every January, March, July and October. Samples are collected from CHPP STP (Monitoring Point 14) and MIA STP (Monitoring Point 15).</p> <p>In Q4 2021 the CHPP STP experienced issues with the membrane filter and as a result all effluent was removed from site. As a result, this Q4 sample was not able to be retrieved.</p>	Complete

Item No.	Audit Recommendation	MACH Energy Response	Forecast Completion
R5.2	<b><u>REC 22:</u></b> Noise Compliance Assessment Reports are to be prepared by an appropriately qualified acoustic consultant	MACH Energy acknowledges the recommendation and can confirm that the monthly noise compliance assessment reports are submitted through the EPA's eConnect portal during annual return submission. Reports are completed by an appropriately qualified acoustic consultant for each month in accordance with Condition L3.2, L3.4, M10.2 and R5.2 of EPL 20850.	Complete
	<b><u>REC 21:</u></b> The 2021 met data spreadsheet should be amended if there is not actually a TEOM on-site. The monitoring equipment should be clear in all spreadsheets going forward.	MACH Energy acknowledges the recommendation and note this in an internal spreadsheet for management purposes. MPO will update the met data spreadsheet to remove reference to TEOM.	Complete