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06/07/2020

Dear Mr Reid

**MOUNT PLEASANT OPERATION (DA 92/97) – INDEPENDENT ENVIRONMENTAL AUDIT**

Reference is made to the Independent Environmental Audit (IEA) report and Response to Audit Recommendations (RAR) for the Mount Pleasant Operation, prepared as required by Schedule 5 condition 9 of DA 92/97, as modified (the consent) and submitted to the Department of Planning, Industry and Environment (the Department) on 18 June 2020.

The Department considers that the IEA report generally satisfies the reporting requirements of the consent/approval. Please note that acceptance of this report is not 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 and at this stage, no further enforcement action is proposed. 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 / Annual Environmental Management Report, until all actions are completed.

If you have any questions, please contact myself on (02) 6575 3401 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 Operation  
Independent Environmental Audit**

**Prepared for:**  
MACH Energy  
PO Box 351  
Muswellbrook, NSW  
2333

SLR Ref: 630.12984-R01  
Version No: -v0.1  
June 2020



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## BASIS OF REPORT

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

This report is for the exclusive use of the Client. No warranties or guarantees are expressed or should be inferred by any third parties. This report may not be relied upon by other parties without written consent from SLR.

SLR disclaims any responsibility to the Client and others in respect of any matters outside the agreed scope of the work.

## DOCUMENT CONTROL

Reference	Date	Prepared	Checked	Authorised
630.12984-R01-v0.3	11 June 2020	Chris Jones	-	Chris Jones
630.12984-R01-v0.2	3 June 2020	Chris Jones	Tracey Ball	Chris Jones
630.12984-R01-v0.1	23 April 2020	Chris Jones	Tracey Ball	Chris Jones

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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), north-west of Muswellbrook and approximately 50 kilometres (km) north-west of Singleton (**Figure 1**). The villages of Aberdeen and Kayuga are located approximately 5 km north-northeast and 1 km north of the MPO boundary, respectively. The proponent of the MPO is MACH Energy Australia Pty Ltd (MACH Energy). As of April 2020, Thiess are the contract miner and Sedgmans operate the Coal Handling Preparation Plant.

The initial development application for the MPO was made in 1997. This was supported by an Environmental Impact Statement (EIS) prepared by Environmental Resources Management Mitchell McCotter (ERM Mitchell McCotter) (ERM Mitchell McCotter, 1997). On 22 December 1999, the then Minister for Urban Affairs and Planning granted Development Consent DA 92/97 to Coal & Allied Operations Pty Ltd (Coal & Allied). This allowed for the “Construction and operation of an open cut coal mine, coal preparation plant, transport and rail loading facilities and associated facilities” at the MPO.

The consent allowed for operations 24 hours per day, seven days per week 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.

The MPO Modification 1 (MOD 1) was submitted for approval on 19 May 2010. 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 Development Consent DA 92/97 boundaries to accommodate the optional conveyor/service corridor and minor administrative changes. MOD 1 was approved on 19 September 2011.

The MPO South Pit Haul Road Modification (MOD 2) was submitted for approval on 30 January 2017 with a supporting Environmental Assessment (EA) prepared by MACH Energy (MACH Energy, 2017a). MOD 2 proposed to realign an indicative internal haul road to enable more efficient access to the South Pit open cut. MOD 2 was approved on 29 March 2017.

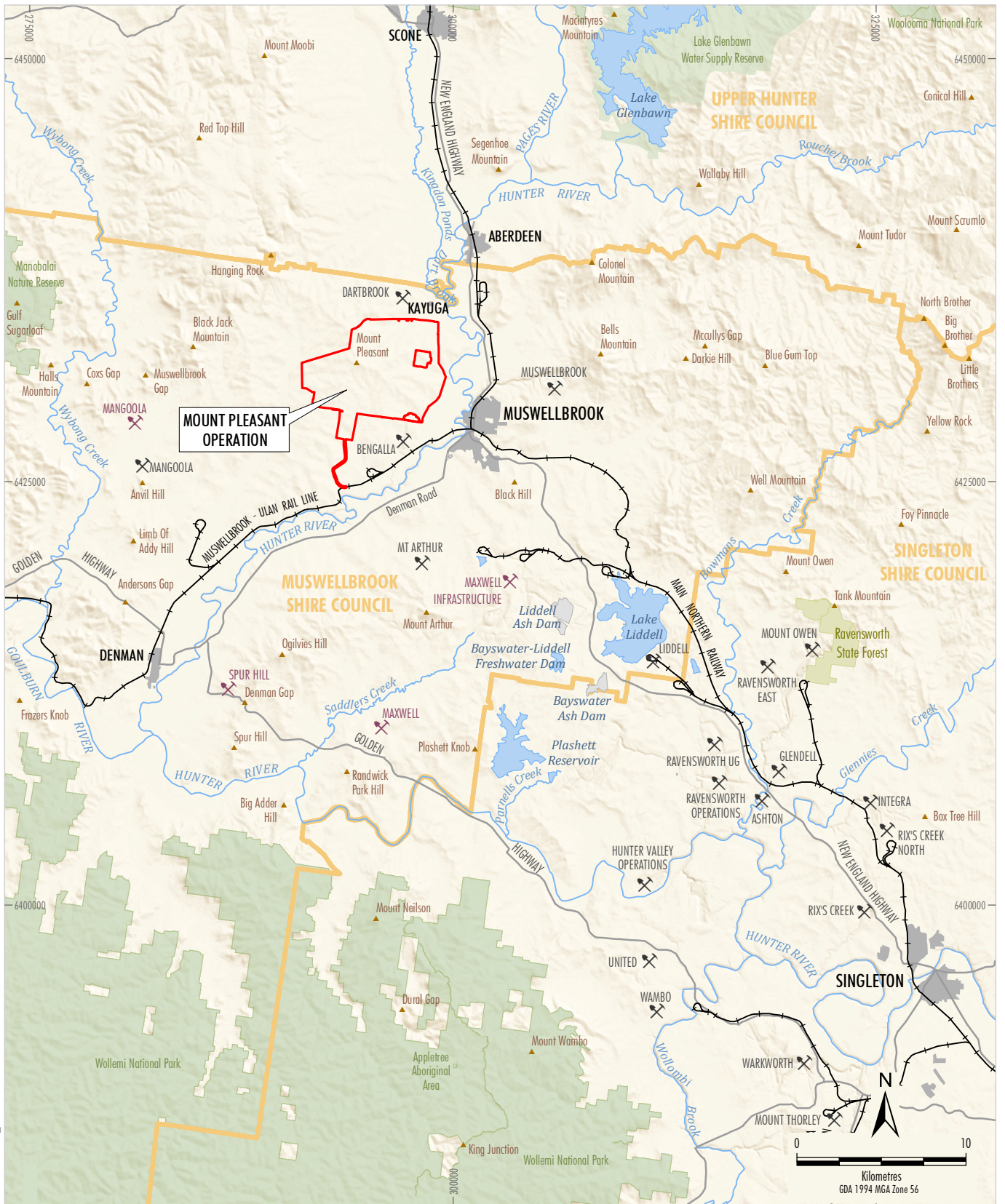
The MPO Mine Optimisation Modification (MOD 3) was submitted on 31 May 2017. MOD 3 comprised an extension to the time limit on mining operations (to 22 December 2026) and extensions to the South Pit Eastern Out of Pit Emplacement to facilitate development of an improved final landform. MOD 3 was approved on 24 August 2018.

The MPO Rail Modification (MOD 4) was submitted on 18 December 2017. MOD 4 proposed the following changes:

- 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; and
- Demolition and removal of 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.

MOD 4 was approved on 16 November 2018. Appendix 2 of the modified Development Consent DA 92/97 illustrates the Conceptual Project Layout Plan of the approved MPO at 2021 and 2025, Approved Surface Disturbance Plan and Conceptual Final Landform incorporating the MOD 4 infrastructure relocations.

**Figure 1** shows the general site layout of the MPO.



MACH 18-03-AR 2019\_201A

Source: NSW Spatial Services (2019)

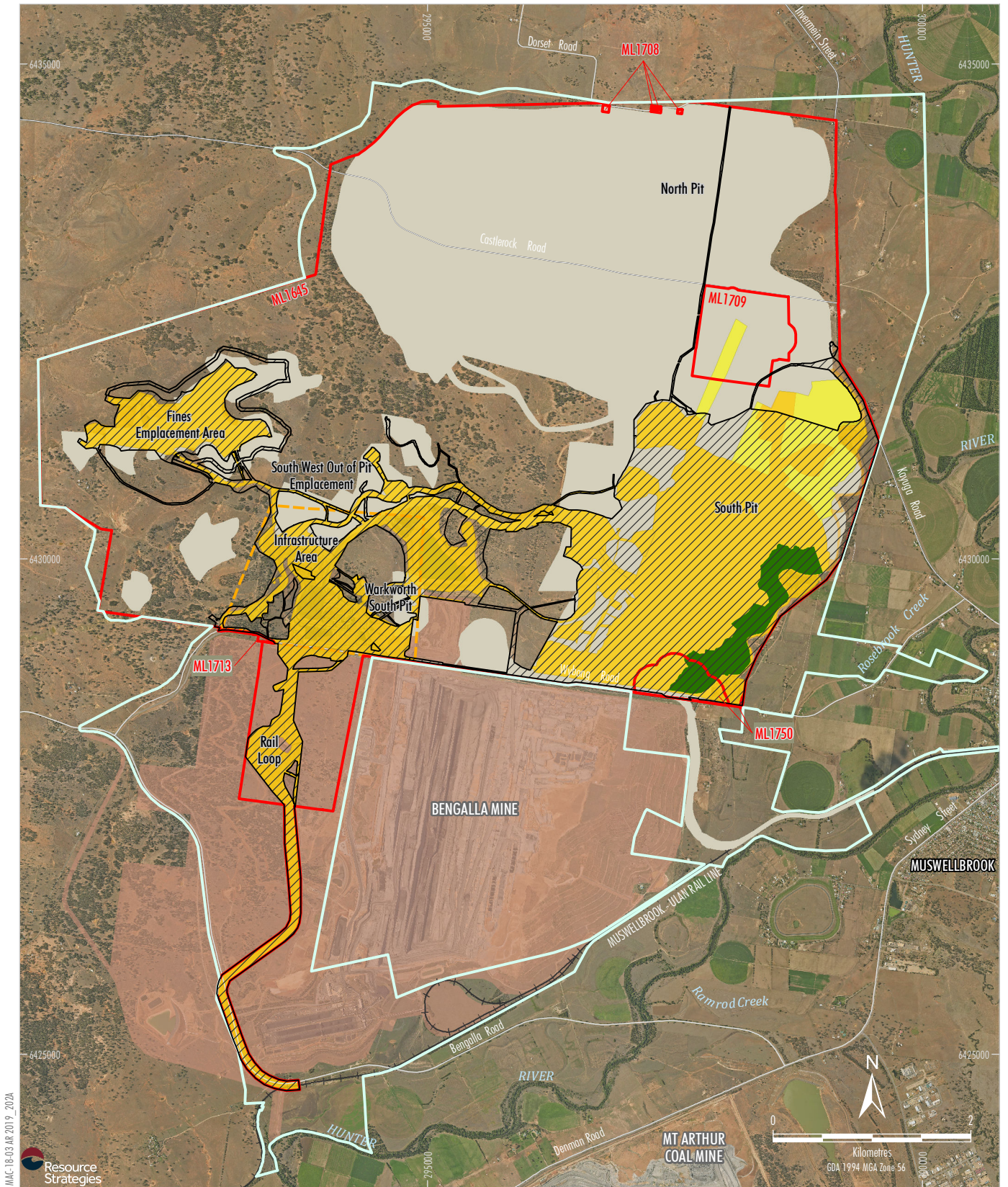


- LEGEND**
- Mining Operation
  - Proposed Mining Operations (Application Lodged)
  - Railway
  - Local Government Boundary
  - State Forest
  - National Parks and Wildlife Estate
  - Mining Lease Boundary (Mount Pleasant Operation)

**MACHEnergy**  
MOUNT PLEASANT OPTIMISATION PROJECT  
Project Location

**Figure 1**





MMC18-03 AR 2019\_202A  
Resource Strategies

- LEGEND**
- Mining Lease Boundary
  - Development Consent Boundary
  - Approximate Extent of Approved Surface Development <sup>1</sup>
  - Infrastructure Area Envelope
  - MOP Footprint <sup>+</sup>
  - End 2019 Active Disturbance Area
  - End 2019 Rehabilitation Area
  - 2020 Forecast Additional Disturbance Area
  - Bengalla Mine Approved Disturbance Boundary (SSD-5170)

**NOTE**  
 1. Excludes some project components such as water management infrastructure, infrastructure within the Infrastructure Area Envelope, offsite coal transport infrastructure, road diversions, access tracks, topsoil stockpiles, power supply, temporary offices, signalling, other ancillary works and construction disturbance.  
 + Mount Pleasant Operation Mining Operations Plan and Rehabilitation Management Plan (July 2019)

Source: MACH Energy (2020); NSW Spatial Services (2019); Department of Planning and Environment (2016)  
 Orthophoto: MACH Energy (Jan 2020)

**MACHEnergy**  
 MOUNT PLEASANT OPERATION  
 2019 Mining Activities

Figure 2

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## 1.2 Audit Scope

This Independent Environmental Audit (Audit) covers the period from 26 November 2017 (day after previous 2017 Independent Environmental Audit) to Day 3 of the site audit (27 February 2020).

The scope of the Audit is outlined in Schedule 5 Condition 9 of Development Consent DA 92/97 (as modified), and includes:

*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.*

The Audit has assessed the key approvals and documentation outlined in **Section 4**, including:

- Development Consent DA 92/97 (including management plans under the consent and statement of commitments);
- Environment Protection Licence (EPL) 20850;
- Mining Leases (MLs) 1645, 1708, 1709, 1713 and 1750; and
- Water Licences - WAL 879, WAL 880, WAL 41438 and WAL 1113.

## 1.3 Key Site Contacts

Contact details for the main MACH Energy contact is outlined below:

**Chloe Annandale**

**Environmental Advisor**

Email: Chloe.Annandale@machenergy.com.au

## 1.4 Audit Methodology

The Audit was undertaken onsite by SLR's Chris Jones (Lead Auditor and Rehabilitation Specialist) and Tracey Ball (Assistant Auditor).

The Noise and Blasting Specialist (Nathan Archer) and Air Quality Specialist (Ali Naghizadeh) assisted with a desktop review of relevant information during the Audit but they did not attend the site inspections.

The SLR Audit team are independent of MACH Energy as defined under Section 3.3 of the Department of Planning, Industry and Environment's (DPIE) *Independent Environmental Audit Guidelines* (October 2015).

Information was provided by MACH Energy during and following the Audit. SLR also sourced a large amount of information from the MACH Energy –MPO website.

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

- Introductory and close out meetings;
- Reviewing key documents provided by MACH Energy prior to the Audit;
- Consultation with relevant government agencies as per the Independent Environmental Audit Guideline requirements prior to the site component;
- Preparation of draft Audit Tables provided to MACH Energy prior to the site Audit;
- Site component of the Audit, included inspections and discussions with key MPO personnel;
- Review of additional relevant documentation obtained while onsite during the inspection or provided by MPO after the site inspection; and
- Client review and comment on the draft Audit report.

The site component was completed on the following days:

- 25 to 27 February 2020– including opening meeting, inspection, determination of compliance, and closeout meeting. Chris Jones from SLR also undertook auditing onsite on 12 March 2020 as the Audit team had not reviewed all relevant conditions of the approval from the earlier site visit.

Photographs taken during the site inspection are included in **Appendix A**. A large amount of evidence was viewed and collected as part of the Audit, including monitoring records, reports, and correspondence. While this key evidence has been referenced in **Section 2**, it has not been attached to this Audit report.

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

The Audit team assessed the approvals and documentation outlined in **Section 4**.

### 1.4.1 Introductory and Close Out Meeting

Introductory and close out meetings were held for the Audit. At the opening meeting introductions were made by each of the meeting attendees and MPO personnel provided background details regarding the site to SLR. During the close out meeting a general discussion about compliance and areas for improvement was undertaken. **Table 1** lists those present at these meetings.

**Table 1 Meeting Attendees**

Name	Role and Company	Comment
Chris Jones	SLR Lead Auditor	Present at opening and closing meetings
Tracey Ball	SLR Assistant Auditor	Present at opening and closing meetings
Chloe Annandale	Mach Energy Environmental Advisor	Present at opening and closing meetings
Chris Masters	MACH Energy Environmental Advisor	Present at opening and closing meetings
Tom Wilson	MACH Energy Senior Process Engineer	Present at opening meeting
Ian Webber	MACH Energy Land and Property Superintendent	Present at opening meeting
Brad Fackender	MACH Energy Project Director	Present at opening meeting
Andrew Reid	MACH Energy Environmental Superintendent	Present at opening and closing meetings
Craig Hawkins	MACH Energy Site Coordinator	Present at opening meeting
Paul O'Loughlin	MACH Energy Principal Mining Engineer	Present at opening and closing meetings
Michael Redman	Thiess Project Manager	Present at opening and closing meetings
Whitney Claxton	Thiess Environment and Community Graduate	Present at opening and closing meetings
Peter York	Thiess Environment and Community Superintendent	Present at opening and closing meetings
Michelle Eckersley	Thiess Environment and Community Officer	Present at opening and closing meetings
Richard Bailey	MACH Energy General Manager - Operations	Present at opening meeting
Megan Kropp	Sedgman CHPP Manager	Present at opening and closing meetings
Ryan Fox	Thiess Mining Manager	Present at opening and closing meetings

## 1.5 Consultation Requirements

**Table 2** outlines the stakeholder consultation completed for the Audit, undertaken in accordance with the Audit Guidelines.

**Table 2 Stakeholder Consultation for the Audit**

Regulatory Authority	Contact Details	Comment from Stakeholder	SLR Response
DPIE	Heidi Watters Senior Compliance Officer Planning & Assessment   Department of Planning, Industry and Environment T02 65753401   E <a href="mailto:heidi.watters@planning.nsw.gov.au">heidi.watters@planning.nsw.gov.au</a>	<ol style="list-style-type: none"> <li>1. Adequacy of actions to address recommendations of the 2017 Audit, and the status of all actions.</li> <li>2. Air quality management and adequacy of responses to real time air quality alarms (e.g. how are these alarms responded to?). Can this process be improved?</li> <li>3. Appropriateness of monitoring locations (air, noise and blast) – are the locations representative of the current neighbouring private residences and are monitors sited in accordance with the relevant standards?</li> <li>4. Predicted (EA) air quality and noise impact compared to actual monitoring results.</li> <li>5. Predicted (EA) mining footprint and rehabilitation compared to actual (current) mine footprint and rehabilitation.</li> <li>6. Complaints management, particularly adequacy of responses to complaints during the IEA period and actions taken by MACH to reduce the number of repeat complainants.</li> </ol>	<ol style="list-style-type: none"> <li>1. The status of actions are assessed in the Annual Reviews. According to the 2019 Annual Review the last of the Audit actions relating to water management was completed in 2019.</li> <li>2. Air quality management and response to real time data was assessed. See <b>Section 5.3</b> for details and <b>Section 6</b> for recommendations.</li> <li>3. SLR has reviewed the management plans and do not have any recommendations specifically regarding changing monitoring locations. Monitoring is completed by trained contractors.</li> <li>4. This is assessed in the Annual Reviews. The site has generally been compliant with monitoring criteria throughout the Audit period.</li> <li>5. Based on the information provided activities have been completed within the EA disturbance footprint. The most up to date comparison of disturbance and rehabilitation are outlined in the Mining Operations Plan (MOP) and Annual Reviews. See <b>Section 5.1</b> for further details.</li> <li>6. Complaints are summarised in <b>Section 4.7</b>.</li> </ol>

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Regulatory Authority	Contact Details	Comment from Stakeholder	SLR Response
Environment Protection Authority (EPA)	Mark Hartwell Unit Head Operations – Hunter Contact no is the general EPA Newcastle Office no 02 49 08 6800 <a href="mailto:Mark.Hartwell@epa.nsw.gov.au">Mark.Hartwell@epa.nsw.gov.au</a>	No response from email to EPA on 15 January 2020.	Nil
Department of Environment, Energy and Science	info@environment.nsw.gov.au	No response from email on 15 January 2020.	Nil

Regulatory Authority	Contact Details	Comment from Stakeholder	SLR Response
Department of Planning and Environment – Resources Regulator (DPE-RR)	Jenn Warner Inspector Environment (Northern Resources Regulator   Department of Planning, Industry and Environment T 02 40636668 E <a href="mailto:jenn.warner@planning.nsw.gov.au">jenn.warner@planning.nsw.gov.au</a>	<ol style="list-style-type: none"> <li>1. Review relevant mining leases and exploration licences as agreed with Resources Regulator;</li> <li>2. Undertake an assessment of compliance against the conditions of title related to environmental management;</li> <li>3. Verify that there is a current Mining Operations Plan (MOP) in place and it has been approved by the Regulator- review compliance against any conditions of approval of the MOP;</li> <li>4. Undertake a critical review of the MOP, including an assessment of its compatibility with the description of operations contained in the planning approval. In particular:                             <ul style="list-style-type: none"> <li>- Review the rehabilitation strategy as outlined in the MOP to determine if it is consistent with the Project Approval in terms of progressive rehabilitation schedule; and proposed final land use(s);</li> <li>- Review the rehabilitation objectives and completion criteria as outlined in the MOP to determine if they have been developed in accordance with the proposed final land use(s) as outlined in the Project Approval.</li> </ul> </li> </ol>	<ol style="list-style-type: none"> <li>1. Mining leases have been reviewed. However Exploration licenses are not a requirement of the Audit Guidelines and have therefore not been assessed. SLR however have audited the exploration conditions within the mining leases.</li> <li>2. Completed as part of the Audit.</li> <li>3. Current MOP has been approved. SLR has reviewed the compliance of the MOP against the Mining Lease conditions</li> <li>4. There were some differences in figures within the Rehabilitation Strategy and the MOP/RMP. See <b>Section 5.1.3</b>.</li> <li>5. There has been minimal rehabilitation monitoring completed at site due to the age of rehabilitation.</li> <li>6. Evidence of rehabilitation repair and maintenance. An area of rehabilitation was recently reshaped. Rehabilitation monitoring has recently commenced.</li> <li>7. Activities have been completed within the approved disturbance footprints. Annual updates are provided in the Annual Review.</li> </ol>

Regulatory Authority	Contact Details	Comment from Stakeholder	SLR Response
		<ol style="list-style-type: none"> <li>5. Review the development and implementation of any rehabilitation monitoring programs to assess performance against the nominated objectives and completion criteria -verified by reviewing monitoring reports and rehabilitation inspection records;</li> <li>6. Determine if a rehabilitation care and maintenance program has been developed and implemented based on the outcomes of monitoring program -verified by reviewing Annual Rehabilitation Programs or similar documentation;</li> <li>7. Confirm that mining operations are being conducted in accordance with the approved MOP (production, mining sequence etc.), including within the designated MOP approval boundary - to be verified by site plans and site inspection;</li> <li>8. Confirm that rehabilitation progress is consistent with the approved MOP as verified by site plans and a site inspection. This should include an evaluation against rehabilitation targets and whether the final landform is being developed in accordance with conceptual final landform in the Project Approval; and</li> <li>9. Based on a visual inspection, determine if there are any rehabilitation areas that appear to have failed or that have incurred an issue that may result in a delay in achieving the successful rehabilitation.</li> </ol>	<ol style="list-style-type: none"> <li>8. <b>Section 5.1.2</b> outlines disturbance and rehabilitation predictions against the MOP. the final landform of the site will progress over the coming years.</li> <li>9. There was an area of failed rehabilitation that was recently reshaped and seeded. At the time of the site inspection there was another area currently being reshaped This has since been completed. See <b>Section 5.1</b> for more details.</li> </ol>



Regulatory Authority	Contact Details	Comment from Stakeholder	SLR Response
Water NSW	Ellie Randall   Water Regulation Officer Natural Resources Access Regulator   Water Regulation (East) T: +61 2 4275 9308   F: +61 2 4224 9740 E: <a href="mailto:ellie.randall@nrar.nsw.gov.au">ellie.randall@nrar.nsw.gov.au</a>	Include a review of the Water Management Plan and Rehabilitation Management Plan. Review water licences for water take.	The Audit has covered the Water Management Plan and Rehabilitation Management Plan. SLR has also reviewed the water licences for water take.
Muswellbrook Shire Council	Sharon Pope Assistant Director Environment and Community Services P: (02) 6549 3868   F: (02) 6549 3701 <a href="mailto:Sharon.Pope@muswellbrook.nsw.gov.au">Sharon.Pope@muswellbrook.nsw.gov.au</a>	<ol style="list-style-type: none"> <li>1. Completion of the audit against key statutory requirements outlined in Section 2 of the DPIE Independent Environmental Audit Guidelines (e.g. assess the environmental performance of the project and whether it is complying with the requirements development approvals and any relevant EPL or Mining Lease, including any assessment, plan or program required under these approvals) would address areas of concern/interest held by Council.</li> <li>2. Ongoing rehabilitation of disturbed areas, including interim rehabilitation where final rehabilitation may be a more long-term action. Conditions of approval require reasonable attempts to minimise the amount of disturbed land on the site. Given the drought and adverse wind conditions over the past 2 years, visible dust has caused concern for the community. The dust does not solely originate from this site, but how these conditions are being addressed should be discussed in the audit.</li> </ol>	<ol style="list-style-type: none"> <li>1. Noted. The Audit covers these requirements.</li> <li>2. The mine plan has been designed to minimise disturbance. Rehabilitation and dust have both been assessed in this Audit. There is a program for progressive rehabilitation.</li> <li>3. Blasting was within criteria. A summary of blasting (including actual blast results) is provided in each Annual Review.</li> </ol>

Regulatory Authority	Contact Details	Comment from Stakeholder	SLR Response
		<p>3. Mine Blast impacts. There have been occasional impacts felt in the Muswellbrook Township from mine blasts over the past few years. Like dust, mine blasts issues can originate from many sites. It would be good to look at the number of times blasts on the site produced vibration and overpressure results that were close to the limits set and possibly see if this could be lessened by things the Mine could do differently.</p>	
Community Consultative Committee (CCC) Chairperson	Dr W.E.J. Paradise AM <a href="mailto:w.paradice@icloud.com">w.paradice@icloud.com</a> Mob +61 (0) 418 680 616	No response from email to CCC Chair on 15 January 2020.	Nil

## 1.6 Statement of Independence

We can confirm independence based on the following:

- No one from the SLR Audit team is related to any proponent, owner, operator or other entity involved in the delivery of the project. Such a relationship includes that of employer/employee, a business partnership, sharing a common employer, a contractual arrangement outside an Independent Audit, or that of a spouse, partner, sibling, parent, or child;
- No one from SLR or the Audit team has any pecuniary interest in the project, proponent or related entities. Such an interest includes where there is a reasonable likelihood or expectation of financial gain (other than being reimbursed for performing the Audit) or loss to the auditor, or their spouse, partner, sibling, parent, or child;
- No one from SLR or the Audit team have provided services (not including independent reviews or auditing) to the current project with the result that the audit work performed by themselves or their company, except as otherwise declared to the Department prior to the audit;
- No one from SLR or the Audit team is an Environmental Representative for the Project; and
- No one from the proposed Audit team can or will accept any inducement, commission, gift or any other benefit from auditee organisations, their employees or any interested party, or knowingly allow colleagues to do so.

## 2 Documents Reviewed and Referenced

Key documentation reviewed as part of the Audit includes:

- DA 92/97;
- EPL 20850;
- Mining leases (ML 1645, ML 1708, ML 1709, ML 1713 and ML 1750);
- Water Licences;
- Annual Reviews – 2017, 2018 and 2019;
- Monitoring results for meteorological, noise, air, water and blasting;
- Rehabilitation Monitoring Report;
- Transport Summary Spreadsheet;
- Environmental Management Plans – as per approval conditions;
- Mining Operations Plans/ Rehabilitation Management Plans (MOPs/ RMPs);
- Annual Returns – across the Audit period;
- Complaints log;
- Evidence of maintenance and calibration;
- CCC Meeting Minutes – across the Audit period; and
- Key consultation with government – including consultation and approval letters.

### 3 Assessment of Compliance

The terms used in the Audit to describe the level of compliance of the site with the relevant approval documentation are outlined in **Table 3** and **Table 4**. These are requirements of the DPIE’s *Independent Environmental Audit Guidelines* (October 2015).

**Table 3 Compliance Assessment Criteria**

Assessment	Criteria
<b>Compliant</b>	Where the Auditor has collected sufficient verifiable evidence to demonstrate that the intent and all elements of the requirement of the regulatory approval have been complied with within the scope of the Audit.
<b>Not Verified</b>	Where the Auditor has not been able to collect sufficient verifiable evidence to demonstrate that the intent and all elements of the requirement of the regulatory approval have been complied with within the scope of the Audit. In the absence of sufficient verification, the Auditor may in some instances be able to verify by other means (visual inspection, personal communication, etc.) that a requirement has been met. In such a situation, the requirement should still be assessed as not verified. However, the Auditor could note in the report that they have no reasons to believe that the operation is non-compliant with that requirement.
<b>Non-Compliant</b>	Where the Auditor has collected sufficient verifiable evidence to demonstrate that the intent of one or more specific elements of the regulatory approval have not been complied with within the scope of the Audit.
<b>Administrative Non-Compliance</b>	A technical non-compliance with a regulatory approval that would not impact on performance and that is considered minor in nature (e.g. report submitted but not on the due date, failed monitor or late monitoring session). This would not apply to performance-related aspects (e.g. exceedance of a noise limit) or where a requirement had not been met at all (e.g. noise management plan not prepared and submitted for approval).
<b>Not triggered</b>	A regulatory approval requirement has an activation or timing trigger that had not been met at the time of the Audit inspection; therefore, a determination of compliance could not be made.
<b>Observation</b>	Observations are recorded where the Audit identified issues of concern which do not strictly relate to the scope of the Audit or assessment of compliance. Further observations are considered to be indicators of potential non-compliances or areas where performance may be improved.
<b>Note</b>	A statement or fact, where no assessment of compliance is required.

**Table 4 Risk Levels for Non-Compliances**

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

## 4 Approvals and Documentation

### 4.1 Previous Audit Recommendations

An update on the previous Audit recommendations are provided in the Annual Review's. The 2019 Annual Review stated there was only one remaining action from the 2017 Audit.

**Table 5 Update of previous Audit Actions**

Recommendation	MACH Energy Response
<p>Schedule 3 Condition 28 Water Management Plan Regularly updated Progressive Erosion and Sediment Control Plans are recommended for Rail Loop area as observation of controls in the area, and discussion with Environmental Superintendent are indicative of improvements that could be made in the area. Clean and dirty catchment confluence points should be a high priority for development of management strategy.</p> <p>An audit of sediment basins by a soil conservationist is believed to have been undertaken; recommendations for improvement should be implemented as soon as practicable.</p> <p>Basin markers (and marking of sediment storage zone) to be installed as soon as is practicable. Upon implementation, photographs of these points can assist in demonstrating compliance with discharge criteria.</p>	<p>As construction/improvement of the Rail Loop progressed, MACH Energy prepared progressive erosion and sediment control plans to achieve Managing Urban Stormwater - Soils and Construction Landcom (2004) standards. Clean and dirty water confluence points continued to be a high priority for the control plans and construction.</p> <p>Sediment basin audits were undertaken progressively on-site at least quarterly and triggered by the commencement of new areas of construction and rainfall events, with the recommendations from these audits implemented progressively. Basin levels were also monitored regularly.</p> <p>Action items from soil conservationist / erosion and sediment control specialist site audit have been undertaken throughout 2019 following audit completion in February. Some outstanding action items are either partially complete or are planned to commence in 2020. Basin markers have been installed in sediment dams.</p>

Recommendations relating to erosion and sediment control and water management are outlined in **Section 5.4**.

### 4.2 Project Approval

The conditions relating to DA 92/97 were assessed as part of this Audit. The Development Consent was first granted on 22 December 1999. DA 92/97 has been modified four times including:

- MOD 1 – approved 19 May 2010;
- MOD 2 – approved 29 March 2017;
- MOD 3 – approved 24 August 2018; and
- MOD 4 – approved 16 November 2018.

### 4.3 Environment Protection Licence

SLR assessed compliance against the EPL 20850 which has an anniversary date of 24 November. Conditions relate to limits, operations, monitoring and reporting.

## 4.4 Management Plans and Programs

The following management plans were assessed as part of the Audit. All the management plans reviewed are required according to DA 92/97 consent conditions with these documents placed on the MPO website. SLR only audited management plans on the MPO website with these outlined in the table below. Further details of the management plans, including implementation are included in the Compliance Spreadsheet (**Appendix 2**). Recommendations relating to management plan updates are included in **Section 6 and 7**.

**Table 6 Management Plans**

Management Plan	Requirement	Comment
Noise Management Plan	DA 92/97 Schedule 3, Condition 9	The management plan on the MPO website is dated 31/10/2019.
Blast Management Plan	DA 92/97 Schedule 3, Condition 17	The management plan on the MPO website is dated 14/01/2019.
Air Quality and Greenhouse Gas Management Plan	DA 92/97 Schedule 3, Condition 23	The management plan on the MPO website is dated 24/05/2019.
Water Management Plan including an Erosion and Sediment Control Plan, Surface Water Management Plan, Ground Water Monitoring Plan and a Surface and Groundwater Response Plan	DA 92/97 Schedule 3, Condition 28	The management plan on the MPO website is dated 31/10/2019.
Biodiversity Management Plan	DA 92/97 Schedule 3, Condition 32	The management plan on the MPO website is dated 31/10/2019.
Aboriginal Heritage Management Plan, which includes the Aboriginal Heritage Conservation Strategy	DA 92/97 Schedule 3, Condition 36	The management plan on the MPO website is dated 31/10/2019.
Road Maintenance Management Plan	DA 92/97 Schedule 3, Condition 41	Evidence of road maintenance plan dated April 2019 with this signed by MACH Energy and Council.
Construction Environmental Management Plan (MOD 4) which includes a Construction Traffic Management Plan, Historical Heritage Management Plan, Unexpected Contamination Protocol	DA 92/97 Schedule 3, Condition 44i	The management plan is on the MPO website and covers MOD 4. Approved on 10 March 2020.
Visual Impact Management Plan	DA 92/97 Schedule 3, Condition 47	The management plan on the MPO website is dated 31/10/2019.
Waste Management Plan	DA 92/97 Schedule 3, Condition 52	The management plan on the MPO website is dated 14/01/2019.



Management Plan	Requirement	Comment
Rehabilitation Strategy	DA 92/97 Schedule 3, Condition 54	The management plan on the MPO website is dated 16/05/2019.
Mining Operations Plan and Rehabilitation Management Plan	DA 92/97 Schedule 3, Condition 56	The MOP/RMP is on the MPO website is dated 28/06/2019.
Environmental Management Strategy	DA 92/97 Schedule 5, Condition 1	The management plan on the MPO website is dated 14/01/2019.

## 4.5 Mining Leases

The following mining leases (ML's) were reviewed as part of the Audit:

- ML 1645;
- ML 1708;
- ML 1709;
- ML1713; and
- ML 1750.

The main mining lease at site is ML 1645 covering the majority of the site. It should be noted that the leases all have the same conditions.

## 4.6 Water Access Licences

These are a series of water access licences (WAL's) at site with the reporting period being 1 July – 30 June. The WAL's are to take water from the Hunter Regulated River Water Source.

The period of WAL's compared to the Audit period differs, therefore SLR has assessed water take from the 2018 and 2019 Annual Reviews.

A total of 681.7 ML of water was taken from the WAL's in the 1 July 2017 – 30 June 2018 reporting period. A total of 622.9 ML of water was taken from the WAL's in the 1 July 2018 – 30 June 2019 reporting period. Both are within the licence water take requirements, with the site being compliant for water take.

## 4.7 Complaints

Complaints have been summarised in the site's complaints log and the Annual Review. Complaints are summarised below:

- 26 November 2017 - 31 December 2017 – 0 complaints;
- 1 January 2018 – 31 December 2018 – 113 complaints relating to air quality (58), noise (35), blasting (11), water (2), visual (3) and other (4);
- 1 January 2019 – 31 December 2019 – 240 complaints relating to air quality (75), noise (100), blasting (39), water (1). Visual (17) and 8 others eg. Lighting; and
- 1 January 2020 - 27 February 2020 – 12 complaints relating to air quality (1), noise (8) and other (3).

The greatest number of complaints related to air quality and noise. MACH Energy provided evidence of responding to complaints through the complaint management process. The large increase in complaints has occurred as the site has transitioned from construction to operations. It is noted that a large number of the complaints are made by a small number of people. Evidence was provided by MACH Energy illustrating meetings with regular complainants. Evidence was also provided of acquisitions and mitigation measures for noise.

## 4.8 Reportable Environmental Incidents

Based on the Annual Review and site records the following is a summary of reportable environmental incidents:

- 26 November 2017 - 31 December 2017 – 0 reportable incidents;
- 1 January 2018 – 31 December 2018 – 0 reportable incidents;
- 1 January 2019 – 31 December 2019 - 0 reportable incidents;
- 1 January 2020 - 27 February 2020 – 0 reportable incidents year to date.

## 4.9 Comparison Against EA Predictions

The DPIE requested the following:

1. Predicted (EA) air quality and noise impact compared to actual monitoring results; and
2. Predicted (EA) mining footprint and rehabilitation compared to actual (current) mine footprint and rehabilitation.

SLR reviewed monitoring results from the Annual Reviews to assess in comparing actual vs predicted impacts. There have been no exceedances of criteria for noise and blast monitoring, therefore the site has been within the EA predictions. There were some exceedances of air quality monitoring with these affected from extraordinary events and outside sources. The Annual Review has not indicated any non - compliances relating to air quality criteria. SLR has a recommendation for an air quality expert to assist with determining extraordinary events and compliance.

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## 5 Environmental Management – Specialist Assessments

### 5.1 Rehabilitation

#### 5.1.1 SLR Findings – Rehabilitation

With construction commencing in 2016 and first coal mining occurring in July 2018 there have been limited opportunities for rehabilitation.

The Resources Regulator audit found the mine's rehabilitation assessment processes could be improved.

Where rehabilitation issues were identified by the mine during inspections, there was *"no process to capture these issues, allocate corrective action tasks, track progress and close out those issues"*. *"Where issues were identified, they remain only on the inspection checklist," the regulator found.*

The site inspection by SLR that focused on rehabilitation determined:

- There was evidence of areas that have been recently shaped and rehabilitated using the geofluvial system. These looked to be well shaped landforms and ripped well on the contour to reduce erosion potential. There has been some large recent rainfall events with these newly shaped rehabilitation areas appearing to be generally stable with a good cover of temporary cover crop.
- Areas of rehabilitation were reshaped and repaired in 2019. Final ripping, topsoiling and seeding of some areas is due to be completed in the coming weeks (following Audit inspection).
- There was evidence of rill erosion and some gully erosion in a section of rehabilitation from 2019. This has been noted previously by MACH Energy and Thiess and the land will be reshaped. Since the site inspection component of the Audit some landform reshaping was undertaken. Gypsum has been used in rehabilitation to help promote growth and stabilize the soil.
- There was a recently constructed drain at the bottom of the rehabilitation area. There are recommendations relating to this area with this outlined in **Section 5.4**.
- SLR was provided evidence of the signoff system for landforms between Thiess and MACH Energy. This involved signoff by both parties at the different phases of rehabilitation including shaping, soil and seedlings.

It was noted that a rehabilitation risk assessment was completed in January 2020 with this to be used in the new MOP going forward. This request was based on the Section 240 notice on 1 November 2019 and required the proponent to:

*Undertake an assessment of the risks to the rehabilitation of the Site. The Rehabilitation Risk Assessment must identify and evaluate all potential risks to achieving the final land use and the specific measures to be implemented to mitigate those risks and have regard to the AS NZS ISO 31000:2009 Risk Management – Principles and Guidelines to support any rehabilitation risk assessment.*

Recommendations to rehabilitation are outlined in **Section 7**. Photographs are outlined in **Appendix A.4**.

### 5.1.2 Comparison again Disturbance and Rehabilitation Commitments

The DPIE requested *Predicted (EA) mining footprint and rehabilitation compared to actual (current) mine footprint and rehabilitation*. Based on the information provided activities have been completed within the EA disturbance footprint. The most up to date comparison of disturbance and rehabilitation commitments are in Annual Reviews.

**Table 7 Comparison of 2018 and 2019 Disturbance and Rehabilitation Predictions**

Mine Area Type	2018 Predicted (from 2017 Annual Review)	2018 Actual (from 2018 Annual Review)	2019 Predicted (from 2018 Annual Review)	2019 Actual (from 2019 Annual Review)
Total Mine Footprint	1,085 ha	701 ha	1020 ha	895 ha
Total Active Disturbance	1,075 ha	618 ha	895 ha	834 ha
Land being prepared for Rehabilitation	5 ha	3 ha	40 ha	39.4 ha
Land under active rehabilitation	5 ha	80 ha	85 ha	7.5 ha
Completed rehabilitation	0 ha	0 ha	0 ha	0 ha

There was less disturbance completed in 2018 compared to predicted disturbance. There was a greater amount of rehabilitation (being prepared or completed) in 2018 compared to predicted rehabilitation. Some rehabilitation areas were reshaped or disturbed again in 2019 which has led to a smaller amount of area under active rehabilitation compared to the 2018 Annual Review predictions.

### 5.1.3 Comparison between Rehabilitation Strategy and MOP

In the stakeholder feedback for this Audit, the Resources Regulator requested the following:

*Undertake a critical review of the MOP, including an assessment of its compatibility with the description of operations contained in the planning approval. In particular:*

- *Review the rehabilitation strategy as outlined in the MOP to determine if it is consistent with the Project Approval in terms of progressive rehabilitation schedule; and proposed final land use(s);*
- *Review the rehabilitation objectives and completion criteria as outlined in the MOP to determine if they have been developed in accordance with the proposed final land use(s) as outlined in the Project Approval.*

When reviewing the Rehabilitation Strategy and MOP/RMP it was determined there were some inconsistencies with figures/plans:

- Figure 3 (Provisional Post - mining Land Use Domains) and Figure 4 (Conceptual Final Landform) of the Rehabilitation Strategy have differences in final landuse.
- Figure 3 in the Rehabilitation Strategy has much of the area shown as Domain C - Agricultural Land, whereas Figure 4 in the Rehabilitation Strategy has much of the area being shown as both agricultural land and open woodland.
- Figure 3 in the Rehabilitation Strategy has a large area as Domain B - Water Infrastructure and Storage, whereas Figure 4 in the Rehabilitation Strategy has this area being rehabilitated woodland. Note: Plan 4 of the MOP has this area marked as Domain B - Water Infrastructure and Storage.
- Figure 3 in the Rehabilitation Strategy has a smaller area of riparian rehabilitation (along established drainage lines compared to Figure 4 in the Rehabilitation Strategy which has riparian vegetation.
- Domain A - Final Void appears to be smaller in the MOP/RMP compared to Figure 3 and 4 of the Rehabilitation Strategy.

It is noted the Rehabilitation Strategy was approved by DPIE on 16 May 2019 whilst the MOP/RMP was approved by the Resources Regulator on 28 June 2019. SLR recommends that these differences between these plans are corrected in the next round of management plan reviews.

Completion criteria have generally been developed in accordance with the MOP and Development Consent requirements. With rehabilitation only being completed for a short period of time, MACH Energy will not yet be meeting completion criteria. Based on discussions with MACH Energy, future rehabilitation monitoring will assess against key criteria requirements.

## 5.2 Noise and Blasting

### 5.2.1 SLR Findings – Noise and Blasting

The field inspection did not indicate any noise related issues with the Project. The following was noted relating to noise management:

- There has been several houses surrounding the mine that have had additional noise mitigation measures.
- There has been a large amount of evidence provided relating to community liaison.
- Noise monitoring results are available on the website. Noise monitoring reports and Annual Review state there has been no exceedance of noise criteria. Monitoring at the representative noise locations (Noise Assessment Groups (NAG's)). Based on site consultation, the acoustics consultancy does not inform the mine of the exact day and time of monitoring therefore this eliminates the risk of operations changing to reduce noise.
- Additional detail for noise management should be included in future Annual Reviews.
- Evidence was provided for sound power level testing for equipment.
- Evidence was provided for the changing operations during higher risk periods. Evidence was provided in the MACH Energy 'Whats Ap' Group where the Open Cut Examiner (OCE) have posted changed operations based on potential higher risk periods. Evidence provided that in Winter 2019 there was no bulk shaping at night in rehabilitation areas.

- Evidence was provided for the real time monitoring system which includes a system to predict areas where noise may be an issue in the upcoming 24 hours. It produces figures illustrating potential noise contours. MACH Energy and Thiess can both download sound files for real time monitoring.
- There was evidence of actions being implemented when the mine was the source of real time noise, including the movement of equipment completing out of pit shaping.
- Evidence of cumulative management through regular meetings. Data sharing does sometimes occur but there is no requirement under the Development Consent.
- Evidence of complaints management, including review of activities from complaints. The noise complaints are included in the Annual Review.
- Recommendations relating to noise management are outlined in **Section 7**.

The following was noted in relation to blast management:

- There were no exceedances of blast criteria during the Audit period.
- Evidence of community consultation and notification for blasting in accordance with the Blast Management Plan.
- Evidence of blasting results from Annual Review.
- No evidence of impacts of people, property or livestock. No evidence of impacts on heritage items, with none within the blast exclusion zones.
- It appears there has been no major issues with blasting fumes based on discussions with site and the review of incident and complaints logs.
- Evidence of co-ordination of blasts with Bengalla and other neighbours through blasting notification emails.
- Evidence of responding to complaints from Mount Pleasant blasting. Evidence provided by the MACH Energy External Relations Officer regarding blast management and community visits.
- There are a series of internal blasting monitors as well to gain more information about blasts.
- Recommendations relating to blasting are outlined in **Section 7**.

## 5.3 Air Quality

### 5.3.1 SLR Findings - Air Quality

#### Site Inspection:

SLR completed the site inspection component on 25 February 2020 and 26 February 2020. During the site inspection on 25 February 2020 dust management was generally managed effectively except in the BC pit. See photographs in **Appendix A.1**. SLR arrived at the look out into the BC pit at approximately 12:30pm on 25 February 2020. There was a lot of dust coming from the excavator loading overburden into haul trucks and then a lot of dust along the haul truck route. From a visual assessment the dust was well above the wheel height for haul trucks and was being tracked along the entire haul route. The dust remained within the pit, but when comparing to the EPA's 2019 *Dust Assessment Handbook* the dust from the haul trucks would be classified as requiring immediate action.



Dust levels require operators to take action to control dust, including potential to make operational changes.

Source: EPA's 2019 *Dust Assessment Handbook*

The Thiess Environment and Community Officer contacted the Open Cut Examiner (OCE) straight away and the OCE said 'they would go and check out the area'. Those completing the site inspection continued to watch activities within the BC pit. Ten minutes later a water truck arrived putting water on the area around the excavator and a section of the haulage route that was approximately 200m long. This reduced dust in this area that had been watered.

There was then no change in operations for approximately the next 30 minutes with digging and haulage continuing. There was no reduction in speed and no water truck used across the majority of the haulage route. The Thiess Environmental Officer tried to contact the OCE two more times but there was no change in activities. It is not known when the water truck recommenced operations in the haulage route as SLR left the BC pit lookout to continue the site inspection.

It should be noted however that 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. However despite, this additional controls should have been installed. It is noted that no real time dust alarms were triggered at the time of the observations.

During the follow up inspection on the 26 February 2020 there were water trucks being utilised along the haul route and an additional excavator operating in the BC pit. There was a noticeable improvement in dust management from the haul trucks and excavators. The lower drop heights from the excavators appeared to be reducing dust from overburden movement.

It is noted that a presentation was sent around to Thiess staff by email on the night of 25 February 2020 outlining the importance of dust management.

#### **Monitoring and Real-time System:**

- There are a series of air quality monitoring locations with high volume air samplers, depositional gauges and Palas Fidas real time monitors.
- EPL 20850 describes monitoring points 1 and 2 (A-PF2 and A-PF5 respectively) as TEOM particulate monitors. The equipment used on site are Palas Fidas dust monitors which are not TEOMs. Palas Fidas dust monitors:
  - Use optical light scattering technology for the determination of particulate concentrations rather than tapered element oscillating microbalance technology used by TEOMs;
  - Have no associated Australian Standard; and
  - Have not been mentioned as an approved method for sampling of ambient PM<sub>10</sub> concentrations in the Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales document.
- Further, the company undertaking the air quality monitoring is not accredited for the methods used to undertake the particulate monitoring using the Palas Fidas dust monitors.

- It is noted that the AQMP for the site mentions: “PM<sub>10</sub> will be assessed for the purpose of real-time environmental management, as far as practicable, as defined by Standards Australia AS/NZS 3580.9.8.2008”. AS/NZS 3580.9.8.2008 being the Australian Standard for continuous sampling and analysis of PM<sub>10</sub> using a TEOM.
- Condition O3.5(b) in EPL 20850 defines “adverse wind conditions” for the MPO as a rolling 1 hour average wind direction between 250 degrees and 340 degrees (inclusive) measured at the Muswellbrook NW Upper Hunter Air Quality Monitoring Network monitor.
- There were numerous shut down days at the site based on the condition of the EPL. Some of the shutdown days in November 2019 and December 2019 were the result of excessive smoke across the region, rather than dust. Based on information provided to SLR there was one non - compliance regarding MACH Energy not implementing a shutdown within the required timeframe. MACH Energy self-reported the event to the EPA, and received an official caution from the EPA on 17 December 2019 as a shutdown on 24 October 2019 had exceeded the allowable 1 hour timeframe by 20 minutes. Whilst operations ceased within the hour (12:30pm), one haul truck continued until 12:34pm and three other haul trucks were reported to have continued hauling operations up until 12:50pm. MACH Energy has since implemented a procedure to ensure the site meets the timing requirements of shutdown conditions.
- Generally it appears that clearing is limited to the areas required for operations.
- Evidence of MACH Energy and Thiess using the air quality prediction system to plan operations around reducing air quality impacts. SLR requested records from several hot and windy days during the audit period. Detailed hourly breakdowns of any changes to the Thiess operations were provided to the audit team.
- Evidence of implementing actions based on the real-time data for green, amber and red trigger levels.
- There was evidence of regular meetings between sites in the area involving Mount Pleasant, Bengalla and Mount Arthur. Data sharing occurs between the sites, but there are no joint monitoring between operations.

Recommendations relating to air quality are outlined in **Section 6**.

## 5.4 Erosion and Sediment Control/Water Management

### 5.4.1 SLR Findings – Erosion and Sediment Control/Water Management

Although there was no requirement for erosion and sediment control/water management specialists as part of this Audit, this section was added to discuss this topic further.

A separate table has been created for water management/erosion and sediment recommendations because they cover specific areas at the site. Photographs are included in **Appendix A.3**.



**Table 8 Water Management /Erosion and Sediment Control Issues and Recommendations**

REC Issue ID	Aspect	General Finding	Recommendation	Photo Reference from Appendix A.3
1	Erosion and Sediment/General	Several minor to moderate erosion and sediment control issues were identified in the field.	Engaging an independent specialist to complete an erosion and sediment control/water management audit to identify all the erosion and sediment control/water management issues at site. Develop an action plan for erosion and sediment control/water management.	-
2	Erosion and Sediment/powerpole	The internal powerline pole that is located within the drainage line near the highwall dam may not be stable long term. The drainage line is heavily eroded in sections. This area flows into the mine water management system and does not go off site.	The internal powerline pole that is located within the drainage line near the highwall dam is to be monitored for integrity. Additional erosion and sediment control work is likely required to ensure the power line is not compromised by failure or movement.	Erosion Photo 5
3	Sediment Fencing	<p>It was noted that most of the sediment fences at the site are well maintained. There are some sediment fences along outskirts of the site that need maintenance or replacement. This includes the sediment fence along the eastern toe drain road.</p> <p>There was also a new drainage line that has been constructed near the current rehabilitation area, with sediment fencing having been installed within the drain. The sediment fencing within the newly constructed drain could fail if rainfall continues as sediment fences are designed for sheet flow, not channeled flow.</p>	<p>Review sediment fencing at the site and replace sections as required.</p> <p>Recommend adding a series of haybales or corr logs in the drainage line near the current rehabilitation area as we understand the drainage in that area will change within a year. When constructed as per the Blue Book, haybales or corr logs will be a far more effective erosion and sediment control for channelized flow than sediment fences.</p>	Erosion Photo 2

REC Issue ID	Aspect	General Finding	Recommendation	Photo Reference from Appendix A.3
4	Water/Erosion and Sediment - Dams	There are several dams at site where there is evidence of rill and gully erosion. Examples include many of the sediment dams and larger dams including the Mine Water Dam, SD1 and Fines Emplacement Area. For the Mine Water Dam, the drainage cutting only goes to the dam lining.	Repair larger rill and gully erosion (including Fines Emplacement Area). This includes the area where the culvert in the Mine Water Dam has created a drainage cutting into the Mine Water Dam. Review erosion and sediment control in this area. Consider extending the pipeline closer into the dam to prevent erosion.  Develop a strategy to minimise erosion of the dam walls.	Erosion Photo 10, 11, 12 and 16.
5	Water/Erosion and Sediment – Farm Dams	Farm dams are generally not shown on the Water Management Plan, however some farm dams within the mining operation area are used as temporary storage areas.	Include all dams in the Water Management Plan.	-
6	Water/Erosion and Sediment – Water NSW Usage	With Water NSW likely to be reducing the water allocation in 2020 it will be important for continual improvement in water usage at the site.	Complete a review of the impacts of the proposed water allocations on the site based on the water allocation limits. From an environmental management and mining perspective it is important that water for the use of dust management is maintained.	-

REC Issue ID	Aspect	General Finding	Recommendation	Photo Reference from Appendix A.3
7	Water/Erosion and Sediment – Bund Area	<p>As you enter the site a large section of the bund of the lefthand side of the entrance road has eroded. This erosion ranges from minor rilling to major gully erosion.</p> <p>A large amount of erosion was identified in the area around the drop structures at site. We understand work is planned to fix the problem. This area flows into the mine water management system and does not go off site.</p>	<p>Complete an erosion and sediment control design of the entrance road bund (borrow pit) to reduce the likelihood of erosion and sediment controls issues. Other features such as horizontal ripping or geofabric matting may be required to reduce the likelihood of erosion.</p>	Erosion Photo 1 and 15
8	Water/Erosion and Sediment – near pit top/workshop area	<p>There is an area where a drainage structure has failed near the MIA/workshop areas. This area flows into the mine water management system and does not go off site.</p>	<p>This requires replacement and engineering advice.</p>	Erosion Photo 3
9	Water/Erosion and Sediment - CHPP	<p>The CHPP requires erosion and sediment control review. SLR understand a significant amount of money has been set aside for this work and engineering designs are progressing. This area flows into the mine water management system and does not go off site.</p>	<p>Implement the actions of the engineering review.</p> <p>Ensure the designs also include a review of the drains that fall just outside the CHPP area (near the Rejects Road). These are older degraded drainage lines.</p> <p>Note, since the Audit inspection some of these areas have been remediated. However additional work is still required in this area.</p>	Erosion Photo 6-9

REC Issue ID	Aspect	General Finding	Recommendation	Photo Reference from Appendix A.3
10	Water/Erosion and Sediment – ED3 Drain	The drain at the construction offices is eroded. This area flows into the mine water management system and does not go off site.	<p>Undertake regular monitoring of the area.</p> <p>Install temporary erosion and sediment controls to ensure that the area remains stable until the area is re-constructed during MOD 4 works.</p>	Erosion Photo 13 and 14
11	Water/Erosion and Sediment – TLO Roadway	The roadway and other areas of the TLO is eroded. This area flows into the mine water management system and does not go off site.	<p>Undertake regular monitoring of the area.</p> <p>Use a grader to push eroded material back into gullies.</p> <p>It should be noted that evidence of remediation of erosion areas along this roadway was provided since the Audit site inspection.</p>	Erosion Photo 4
12	Cleanwater management	The light vehicle and medium vehicle track runs around the site, with most of the road within the 'cleanwater catchment'. It was noted that there is sediment fencing and good quality groundcover in many of the areas downstream of the road. However some areas in the western section of the haul road were bare, with no erosion and sediment controls downstream.	<p>Continue to maintain the light vehicle and medium vehicle road.</p> <p>Completion of seeding in bare areas which form part of the cleanwater catchment. Note, there has been evidence of some tree planting in this area since the Audit site inspection was completed.</p> <p>Review the need for sediment fencing some areas until grass cover is established.</p>	Erosion Photo 18

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REC Issue ID	Aspect	General Finding	Recommendation	Photo Reference from Appendix A.3
13	Tailings Pipeline	There is a cleanwater drain that crosses the fines pipeline. A leak in this area could result in tailings going into the cleanwater system.	Review engineering controls to reduce the likelihood of any tailings spill going into the cleanwater dam. Possible use of sleeve to contain tailings pipeline.  Note, evidence provided since the Audit inspection of the installation of end of line burst protection flow meters.	Water Management Photo 17

## 6 Audit Findings – Summary of Non – Compliances

**Table 9** outlines the summary of non - compliances and proposed recommendations relating to:

- Development Consent DA 92/97;
- Statement of Commitments;
- Management plans under the consent and statement of commitments;
- Environment Protection Licence (EPL) 20850;
- Mining Leases (MLs) 1645, 1708, 1709, 1713 and 1750; and
- Water Licences - WAL 879, WAL 880, WAL 41438 and WAL 1113.

**Table 9 Summary of Non - compliances**

Schedule and Condition Number	Condition	Compliance Status	Evidence	Recommendations
<b>Development Consent DA 92/97</b>				
S2 C12	<p><b>Operation of Plant and Equipment</b></p> <p>The Applicant must ensure that all plant and equipment used on site, or to transport coal from the site, is:</p> <p>(a) maintained in a proper and efficient condition; and</p> <p>(b) operated in a proper and efficient manner.</p>	Non-Compliant (Low Risk)	<p>a) Detailed JDE Plant Maintenance Schedule provided to SLR. This included evidence of past servicing and future servicing. This includes dozers, frana cranes and light vehicles.</p> <p>There was also evidence of the Thiess Plant Maintenance Schedule.</p>	See other conditions for specific recommendations regarding dust.

Schedule and Condition Number	Condition	Compliance Status	Evidence	Recommendations
			<p>Evidence of realtime noise and air maintenance and calibration for PM<sub>10</sub> monitors and noise monitors (Barn owls).</p> <p>Area of bitumen road along the light vehicle medium vehicle track has failed. This is general maintenance issue.</p> <p>b) <u>Non - Compliance for operations in a proper and efficient manner-</u> Based on the site inspection hauling of trucks was not being operated in a proper manner. SLR witnessed the overburden hauling of trucks from within the pit to the out of pit area around 12:30pm on 25 February 2020. During this time there was little use of watercarts. The watercart was only used on a small section of the haul route close to where the excavator was loading overburden into haul trucks. There was no speed reduction of haul trucks during the time of the site inspection. See Section 5 of the Audit Report for further details. Recommendations specifically relating to air quality are covered in other conditions.</p>	<p><b>REC 1 – Bitumen Track</b></p> <p>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.</p>

Schedule and Condition Number	Condition	Compliance Status	Evidence	Recommendations
			<p>It should be noted however that 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. However despite this additional controls should have been installed. It is noted that no real time dust alarms were triggered at the time of the observations.</p>	
S3 C20	<p><b>Air Quality Criteria</b>                      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>	<p><b>Administrative Non-Compliance</b></p>	<p>Data reviewed during the Audit period. There has been some exceedances, however evidence has been provided to ensure these are not non - compliances. However admin non - compliances for full data capture.</p> <p>There were regional dust events nominated by the DPIE with these being excluded. There have also been 'bushfire events' which have been excluded by DPIE.</p> <p><u>Admin Non - Compliance</u> for data capture.</p>	<p>There is no specific recommendation as data capture was quite high during the Audit period.</p>



Schedule and Condition Number	Condition	Compliance Status	Evidence	Recommendations																													
	<p><i>Table 8: Long term criteria for particulate matter</i></p> <table border="1"> <thead> <tr> <th>Pollutant</th> <th>Averaging Period</th> <th><sup>d</sup>Criterion</th> </tr> </thead> <tbody> <tr> <td>Total suspended particulate (TSP) matter</td> <td>Annual</td> <td><sup>a</sup>90 µg/m<sup>3</sup></td> </tr> <tr> <td>Particulate matter &lt; 10 µm (PM<sub>10</sub>)</td> <td>Annual</td> <td><sup>a</sup>25 µg/m<sup>3</sup></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/m<sup>3</sup></td> </tr> </tbody> </table> <p><i>Table 9: Short term criteria for particulate matter</i></p> <table border="1"> <thead> <tr> <th>Pollutant</th> <th>Averaging Period</th> <th><sup>d</sup>Criterion</th> </tr> </thead> <tbody> <tr> <td>Particulate matter &lt; 10 µm (PM<sub>10</sub>)</td> <td>24 hour</td> <td><sup>b</sup>50 µg/m<sup>3</sup></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/m<sup>3</sup></td> </tr> </tbody> </table> <p><i>Table 10: Long term criteria for deposited dust</i></p> <table border="1"> <thead> <tr> <th>Pollutant</th> <th>Averaging Period</th> <th>Maximum increase in deposited dust level</th> <th>Maximum total deposited dust level</th> </tr> </thead> <tbody> <tr> <td><sup>c</sup> Deposited dust</td> <td>Annual</td> <td><sup>b</sup>2 g/m<sup>2</sup>/month</td> <td><sup>a</sup>4 g/m<sup>2</sup>/month</td> </tr> </tbody> </table> <p>Notes to Tables 8-10:  <sup>a</sup> Total impact (i.e. incremental increase in concentrations due to the development plus background concentrations due to all other sources);  <sup>b</sup> Incremental impact (i.e. incremental increase in concentrations due to the development on its own);  <sup>c</sup> Deposited dust is to be assessed as insoluble solids as defined by Standards Australia, AS/NZS 3566 (0.1.2003) Methods for Sampling and Analysis of Ambient Air - Determination of Particulate Matter - Deposited Matter - Gravimetric Method; and  <sup>d</sup> Excludes extraordinary events such as bushfires, prescribed burning, dust storms, sea fog, fire incidents or any other activity agreed by the Secretary.</p>	Pollutant	Averaging Period	<sup>d</sup> Criterion	Total suspended particulate (TSP) matter	Annual	<sup>a</sup> 90 µg/m <sup>3</sup>	Particulate matter < 10 µm (PM <sub>10</sub> )	Annual	<sup>a</sup> 25 µg/m <sup>3</sup>	Particulate matter < 2.5 µm (PM <sub>2.5</sub> )	Annual	<sup>a</sup> 8 µg/m <sup>3</sup>	Pollutant	Averaging Period	<sup>d</sup> Criterion	Particulate matter < 10 µm (PM <sub>10</sub> )	24 hour	<sup>b</sup> 50 µg/m <sup>3</sup>	Particulate matter < 2.5 µm (PM <sub>2.5</sub> )	24 hour	<sup>b</sup> 25 µg/m <sup>3</sup>	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/m <sup>2</sup> /month	<sup>a</sup> 4 g/m <sup>2</sup> /month		<p>There was a malfunction APF4 in 2018. With this resulting in hiring a TEOM. This resulted in some lost data. However APF4 is an internal monitor.</p> <p>PM<sub>10</sub> was not monitored continuously at Point 1 during the reporting period, with capture rate being 99% or 362 days out of 365. Equipment malfunction and power outage were the primary cause of data loss.</p> <p>The 2019 Annual Review stated that:</p>	
Pollutant	Averaging Period	<sup>d</sup> Criterion																															
Total suspended particulate (TSP) matter	Annual	<sup>a</sup> 90 µg/m <sup>3</sup>																															
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Schedule and Condition Number	Condition	Compliance Status	Evidence	Recommendations
			<p><i>During the reporting period, it was identified that PM<sub>2.5</sub> monitoring results were consistently higher than would be expected. An investigation (with co-located TEOM monitoring) determined that the calibration factor being applied to the raw PM<sub>2.5</sub> and PM<sub>10</sub> measurements was incorrect (i.e. was overstating particulate levels). A letter describing the investigation and outcomes is provided in Appendix D of the 2019 Annual Review. The data presented in this document therefore applies the new calibration factors determined for PM<sub>2.5</sub> and PM<sub>10</sub>. Consistent with advice from the technical specialist who conducted the investigation, the new calibration factors have also been applied to data from previous years (including the 2018 data presented in this Annual Review).</i></p>	

Schedule and Condition Number	Condition	Compliance Status	Evidence	Recommendations
S3 C22	<p><b>Air Quality Operating Conditions</b></p> <p>The Applicant must:</p> <ul style="list-style-type: none"> <li>a) implement best practice air quality management, including all reasonable and feasible measures to minimise the odour, fume and dust emissions of the development;</li> <li>b) minimise visible air pollution generated by the development;</li> <li>c) minimise, where reasonable and feasible, the extent of potential dust generating surfaces exposed on the site at any given point in time;</li> <li>d) minimise the air quality impacts of the development during adverse meteorological conditions and extraordinary events (see Noted above under Tables 8-10);</li> <li>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</li> </ul>	<p>Non-Compliant (Low Risk)</p>	<p>a) <u>Non Compliance -field evaluation</u>. Air quality issues identified during the audit. See Section 5.3 of the report for further details. Issues relating to dust from haul roads in the pit circuit and dust from the Excavator dumping overburden into the truck. The lack of a water truck when viewing into the BC pit on 25 February 2020 across the majority of the haulage route was not best practice. The dust was also above the visual assessment levels in the EPA Dust Assessment Handbook 2019 and additional mitigation measures should have been implemented.</p> <p>b) Mitigation measures outlined in the Air Quality and Greenhouse Gas Management Plan.</p> <p>c) It appears that clearing is limited to the areas required for operations.</p>	<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.</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 (eg. 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.</p>

Schedule and Condition Number	Condition	Compliance Status	Evidence	Recommendations
	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.		d) and e) This included records of shut down days and changed operations. Evidence of using the air quality prediction system to plan operations around reducing air quality impacts. SLR requested records from several hot and windy days during the audit period and detailed hourly breakdowns of any changes to the Thiess operations were provided	These would include the pits and higher areas of the site. All required personnel have access to cameras.  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.  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.

Schedule and Condition Number	Condition	Compliance Status	Evidence	Recommendations
			<p>MACH Energy received an official caution on 17 December 2019 as a shutdown on 24 October 2019 had exceeded the allowable 1 hour timeframe by 20 minutes. Whilst operations ceased within the hour (12:30pm), one haul truck continued until 12:34pm and three other haul trucks were reported to have continued hauling operations up until 12:50pm. MACH Energy has since implemented a procedure to ensure the site meets the timing requirements of shutdown conditions. With regards to shutdown the non - compliance relates to the EPL condition for shut down, not the condition e) of this consent. As condition e) refers to 'compliance with conditions of consent' ie. Schedule 3 Condition 20 criteria.</p> <p>f) Evidence of regular meetings between sites. Data sharing if required between the sites, but there are no joint monitoring between operations.</p>	
S3 C23	<b>Air Quality and Greenhouse Gas Management Plan</b>	Non-Compliant (Low Risk)	<p><u>Preparation:</u></p> <p>a) Date prior to the Audit period;                      b) Section 7-11;</p>	As per <b>REC 2 Dust</b>

Schedule and Condition Number	Condition	Compliance Status	Evidence	Recommendations
	<p>The Applicant must prepare an Air Quality and Greenhouse Gas Management Plan for the development to the satisfaction of the Secretary. This plan must:</p> <p>a) be submitted to the Secretary for approval prior to carrying out any development on site;</p> <p>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;</p> <p>c) include an air quality monitoring program that:</p> <ul style="list-style-type: none"> <li>• uses a combination of real-time monitors and supplementary monitors to evaluate the performance of the development;</li> <li>• includes PM<sub>2.5</sub> monitoring (although this obligation could be satisfied by the regional air quality monitoring network if sufficient justification is provided);</li> <li>• includes a protocol for determining exceedances of the relevant conditions of this consent; and</li> </ul>		<p>c) Section 1 illustrates monitoring program.                      d) Section 9.8.</p> <p><u>Implementation:</u>                      The mitigation measures within the AQMP have been assessed for implementation.</p> <p><u>Non - compliance</u> with the AQMP in terms of watering of haul roads. Section 9.2 of the AQMP states:  <i>“Watercarts will be utilised as necessary to minimise excessive visible dust”.</i></p>	

Schedule and Condition Number	Condition	Compliance Status	Evidence	Recommendations
	<p>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.</p>		<p>Air quality issues identified during the site inspection component of the audit. See Section 5.3 of the report for further details. Issues relating to dust from haul roads in the pit circuit and dust from the excavator dumping overburden into the haul truck. The lack of a watercart when viewing into BC pit on 25 February 2020 across the majority of the haulage route was not evidence of best practice. The dust was also above the visual assessment levels in the EPA Dust Assessment Handbook 2019 and additional mitigation measures should have been implemented.</p> <p>It should be noted however that 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. However despite this additional controls should have been installed. It is noted that no real time dust alarms were triggered at the time of the observations.</p>	

Schedule and Condition Number	Condition	Compliance Status	Evidence	Recommendations
			<p>It was noted during the site inspection that some areas of soil stockpiles have not yet been seeded. These should be seeded. It is noted that the current commitment in the AQMP does not designate a timeframe for seeding of stockpiles.</p> <p>Long-term stockpiles will be revegetated as soon as practicable following completion.</p> <p>Also see the wording in Schedule 3 Condition 22 regarding the shutdown issue on day on 24 October 2019.</p>	
S3 C24	<p><b>Meteorological Monitoring</b></p> <p>For the life of the development, the Applicant must ensure that there is a meteorological station operating in the vicinity of the site that:</p> <ul style="list-style-type: none"> <li>a) complies with the requirements in the Approved Methods for Sampling of Air Pollutants in NSW guideline; and</li> <li>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.</li> </ul>	Administrative Non-Compliance	<p>Monthly report by Ecotech.</p> <p>There has been some downtime for certain sensors during the audit period which has resulted in a small loss of data. This constitutes an admin non-compliance but this is consistent with most other mine sites. It should be noted there are two meteorological stations at site and it is unlikely that both would be down at the same time.</p>	No further recommendation as there was only a minor loss of data.



Schedule and Condition Number	Condition	Compliance Status	Evidence	Recommendations
			<p>Evidence of meteorological system with monthly reports.</p> <p>Evidence of live weather system with alarms going to Ecotech.</p>	
S3 C49	<p><b>Waste Minimisation and Disposal</b></p> <p>The Applicant must:</p> <ul style="list-style-type: none"> <li>a) minimise the waste (including coal reject) generated by the development;</li> <li>b) ensure that the waste generated by the development is appropriately stored, handled and disposed of in a lawful manner.</li> </ul>	Non-Compliant (Low Risk)	<ul style="list-style-type: none"> <li>a) Based on the evidence provided the site has minimised the amount of waste being generated.</li> <li>b) Non - compliance for implementation for waste storage however this was classified as a low risk. See Schedule 3 Condition 52.</li> </ul>	See Schedule 3 Condition 52.
S3 C52	<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 DoI Water and DRG, 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; and</li> </ul>	Non-Compliant (Low Risk)	<p><u>Preparation:</u></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) Section 5.</li> <li>c) Appendix 1.</li> <li>d) Section 7.2. See Section.</li> </ul> <p><u>Implementation: Non - compliant for hydrocarbon and chemical storage.</u></p>	<p><b>REC 3 Waste</b></p> <p><u>R3.1: In - pit Storage</u></p> <ul style="list-style-type: none"> <li>a) &amp; b) Ensure all waste is separated out and stored in the correct waste or recycle bin.</li> <li>c) Ensure all hydrocarbon spills are cleaned up.</li> <li>d) 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>

Schedule and Condition Number	Condition	Compliance Status	Evidence	Recommendations
	<p>d) a program to evaluate the fines emplacement plan and methods, with a view to emplacing fines within active mining areas.</p> <p>The Applicant must implement the management plan as approved by the Secretary.</p>		<p><u>In-pit storage area:</u></p> <p>a) The general waste bins contained oily rags and cardboard. In one bin the rags were soaked with hydrocarbon material and should have been placed in a separated oily rag bin.</p> <p>b) Oily rags were not stored in the oily rag bin. Instead, they were in bags on a pallet, with one bag open and oily rags spilling out on the ground.</p> <p>c) Small hydrocarbon spill identified.</p> <p>d) There were five 44 gallon drums (some full, some mostly empty) with oil. There were three bulky bins (some half full, some mostly empty)</p> <p><u>Workshop area:</u></p> <p>a) One unlabelled general waste bin. Other labelling was adequate.</p> <p>b) Small oil drip from an engine prepared for transport in the storage area. A drip tray was previously under the area but was removed due to heavy rain.</p>	<p><u>R3.2: Workshop Area</u></p> <p>a) Ensure Remondis label all waste bins.</p> <p>b) Place oil pan under any engines/equipment stored in unbunded areas, that have the potential to drip any hydrocarbons/fluid etc.</p> <p>c) Ensure all chemicals/hydrocarbons are banded. This includes both full and empty oil drums/containers. Old hydrocarbon containers should be removed from site as soon as practical.</p> <p><u>R3.3: Construction Offices</u></p> <p>a) Ensure all waste is separated out and stored in the correct waste or recycle bin.</p> <p>b) Ensure all chemicals/hydrocarbons are banded.</p> <p>c) Ensure all contaminated material is transported to the bioremediation area or disposed of offsite by a suitable qualified contractor.</p>

Schedule and Condition Number	Condition	Compliance Status	Evidence	Recommendations
			<p>c) There were six bulky bins of gear oil (85W-140) which were not banded. Based on site discussions they had been unloaded but were not yet stored in banded shipping containers. There were also approximately 20 mostly empty bulky bin containers not stored in banded. There was seven 44 gallon drums (appeared full) with oil.</p> <p><u>Construction offices:</u></p> <p>a) Cardboard was in the general waste bin.</p> <p>b) Unbanded containers, oil drum and battery.</p> <p>c) Bagged contaminated soil from a diesel spill was in the storage area. Most of this material was from the spill kit.</p>	
<b>Statement of Commitments</b>				
-	<p><b>Air Quality</b>                      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.</p>	<p>Non-Compliant (Low Risk)</p>	<p><u>Non - compliance</u> with the AQMP in terms of watering of haul roads. Section 9.2 of the AQMP states:</p> <p><i>'Watercarts will be utilised as necessary to minimise excessive visible dust'.</i></p>	

Schedule and Condition Number	Condition	Compliance Status	Evidence	Recommendations
			<p>Air quality issues identified during the site inspection component of the audit. See Section 5.3 of the report for further details. Issues relating to dust from haul roads in the pit circuit and dust from the Excavator dumping overburden into the haul truck. The lack of a watercart when viewing into BC pit on 25 February 2020 across the majority of the haulage route was not evidence of best practice. The dust was also above the visual assessment levels in the EPA Dust Assessment Handbook 2019 and additional mitigation measures should have been implemented.</p> <p>It should be noted however that 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. However despite this additional controls should have been installed. It is noted that no real time dust alarms were triggered at the time of the observations.</p>	

Schedule and Condition Number	Condition	Compliance Status	Evidence	Recommendations
			<p>It was noted during the site inspection that some areas of soil stockpiles have not yet been seeded. These should be seeded. It is noted that the current commitment in the AQMP does not designate a timeframe for seeding of stockpiles.</p> <p>Long-term stockpiles will be revegetated as soon as practicable following completion.</p>	
<b>Environment Protection Licence (EPL) 20850</b>				
O1.1	<p><b>Operating Conditions</b>                      Licensed activities must be carried out in a competent manner.                      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; and</li> <li>b) the treatment, storage, processing, reprocessing, transport and disposal of waste generated by the activity.</li> </ul>	Non-Compliant (Low Risk)	<p>a) <u>Non-Compliant:</u> Dust issues (movement of material) identified with lack of water trucks along the haulage route on 25 March 2019 site inspection. See Section 5 of the main document for details.</p> <p>b) <u>Non-compliant:</u> Non - compliant for hydrocarbon and chemical storage.</p> <p><u>In-Pit Storage:</u></p> <p>a) The general waste bins contained oily rags and cardboard.</p>	As per <b>REC 3 Waste</b>

Schedule and Condition Number	Condition	Compliance Status	Evidence	Recommendations
			<p>b) Oily rags were not stored in the oily rag bin. Instead, they were in bags on a pallet, with one bag open and oily rags spilling out on the ground.</p> <p>c) Small hydrocarbon spill.</p> <p><u>Workshop Area:</u></p> <p>a) Unlabelled general waste bin.</p> <p>b) Oil drip from engine in storage area.</p> <p>c) Oil and flocculant were unbunded.</p> <p><u>Construction Offices:</u></p> <p>a) Cardboard was in the general waste bin.</p> <p>b) Unbunded containers, oil drum and battery.</p> <p>c) Bagged contaminated soil from a diesel spill was in the storage area.</p>	
O2.1	<p><b>Maintenance of Plant and Equipment</b>                      All plant and equipment installed at the premises or used in connection with the licensed activity:</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>	Non-Compliant (Low Risk)	<p>a) Detailed JDE Plant Maintenance Schedule provided to SLR. This included evidence of past servicing and future servicing. This includes dozers, frana cranes and light vehicles.</p> <p>There was also evidence of the Thiess Plant Maintenance Schedule.</p>	See other conditions for specific recommendations.

Schedule and Condition Number	Condition	Compliance Status	Evidence	Recommendations
			<p>Evidence of realtime noise and air maintenance and calibration for PM<sub>10</sub> monitors and noise monitors (Barn owls).</p> <p><u>b) Non - Compliance for operating in a proper and efficient manner</u> - Based on the site inspection hauling of trucks was not being completed in an efficient manner. SLR witnessed hauling of trucks looking into the pit from around 11:30 - 12:10pm on 25 February 2020 and there was little use of watercarts for 90% of the haulage route. See Section 5.2 of the Audit Report for further details. Recommendations specifically relating to air quality are covered in other conditions.</p>	

Schedule and Condition Number	Condition	Compliance Status	Evidence	Recommendations
			It should be noted however that 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. However despite this additional controls should have been installed. It is noted that no real time dust alarms were triggered at the time of the observations.	
O3.1	<b>Dust</b> The premises must be maintained in a condition which minimises or prevents the emission of dust from the premises.	<b>Non-Compliant (Low Risk)</b>	During the site inspection on 25 February 2020 noted that only a small section of the haul road to the BC pit was watered which means the site was not effectively minimising dust generation. Although no visible dust was seen leaving the site during the site inspection, effective mitigation measures were not implemented.  By not using watertrucks the site was not maintaining roads to minimise dust.	As per <b>REC 2 Dust</b>



Schedule and Condition Number	Condition	Compliance Status	Evidence	Recommendations
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.	Non-Compliant (Low Risk)	During the site inspection on 25 February 2020 noted that only a small section of the haul road to the BC pit was watered which means the site was not effectively minimising dust generation. Although no visible dust was seen leaving the site during the site inspection, effective mitigation measures were not implemented.	As per <b>REC 2 Dust</b>
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.	Non-Compliant (Low Risk)	During the site inspection on 25 February 2020 noted that the haul road to the pit was not maintained in a condition (minimal use of the watercart) to effectively minimise dust. Although no visible dust was seen leaving the site during the site inspection, effective mitigation measures were not implemented.  It is noted that the site has committed to progressive rehabilitation through the MOP.	As per <b>REC 2 Dust</b>
O3.4	<b>Dust</b>	Administrative Non-Compliance	There were numerous shut down days at the site based on the condition of the EPL. Some of the shutdown days in November and December 2019 were the result of excessive smoke across the region, rather than dust.	As per <b>REC 2 Dust</b>

Schedule and Condition Number	Condition	Compliance Status	Evidence	Recommendations
	The licensee must cease all dust generating activities during adverse conditions being the occurrence of both the adverse wind conditions set out in Condition O3.5 (b) and the adverse PM 10 concentrations set out in Condition O3.5(c).		<p>Based on information provided to SLR there was one non - compliance regarding MACH Energy not implementing a shutdown within the required timeframe. MACH Energy received an official caution on 17 December 2019 as a shutdown on 24 October 2019 had exceeded the allowable 1 hour timeframe by 20 minutes. Whilst operations ceased within the hour (12:30pm), one haul truck continued until 12:34pm and three other haul trucks were reported to have continued hauling operations up until 12:50pm. MACH Energy has since implemented a procedure to ensure the site meets the timing requirements of shutdown conditions.</p> <p>SLR has labelled this an <u>Admin Non - Compliance</u> as there was no evidence any impacts associated with the slight delay in shutting down all operations.</p>	
O3.6	<b>Dust</b>	<b>Administrative Non-Compliance</b>	There was a large amount of evidence provided for dust shutdown days. Evidence provided by Thiess illustrating changed operations and shutdowns.	As per <b>REC 2 Dust</b>

Schedule and Condition Number	Condition	Compliance Status	Evidence	Recommendations								
	Shutdown of dust generating activities required by Condition O3.4 must be completed within 1 hour of receiving data that triggers action required by Condition O3.4.		<p>Based on information provided to SLR this only occurred once however this still makes this a non - compliance. MACH Energy received an official caution as on 24 October 2019 the shutdown exceeded the allowable 1 hour timeframe by 20 minutes. Whilst operations ceased within the hour (12:30pm), one haul truck continued until 12:34pm and three other haul trucks were reported to have continued hauling operations up until 12:50pm.</p> <p>Generally it appears to site is implementing the appropriate shutdowns with only evidence provided for the one incident on 24 October 2019. MACH Energy has since implemented a procedure to ensure the site meets the timing requirements of shutdown conditions.</p>									
M2.2	<p><b>Air Quality Monitoring Requirements</b></p> <table border="1"> <thead> <tr> <th>Pollutant</th> <th>Units of measure</th> <th>Frequency</th> <th>Sampling Method</th> </tr> </thead> <tbody> <tr> <td>PM10</td> <td>milligrams per cubic metre</td> <td>Continuous</td> <td>Special Method 1</td> </tr> </tbody> </table>	Pollutant	Units of measure	Frequency	Sampling Method	PM10	milligrams per cubic metre	Continuous	Special Method 1	Administrative Non-Compliance	According to the 2018 Annual Review:	No further recommendations as the site had a high percentage of data recording during the Audit period.
Pollutant	Units of measure	Frequency	Sampling Method									
PM10	milligrams per cubic metre	Continuous	Special Method 1									

Schedule and Condition Number	Condition	Compliance Status	Evidence	Recommendations
			<p><i>PM<sub>10</sub> was not monitored continuously at Point 1 during the reporting period, with capture rate being 99% or 362 days out of 365. Equipment malfunction and power outage were the primary cause of data loss. No pollution or environmental harm occurred as a result of the non-compliance. The site had a high percentage for recorded data.</i></p> <p>PM<sub>10</sub> reported as µg/m<sup>3</sup> in 2017 and 2018 Annual Reviews.</p>	
M4.1	<p><b>Weather Monitoring</b></p> <p>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.</p>	Administrative Non-Compliance	<p>* Annual Returns refer to monitoring points 11 and 4.</p> <p>January 2019 Monthly Environmental Monitoring Report states:                      Weather data is measured continuously at the Kayuga Road meteorological station (M-WS4) (Point 4). In addition to air quality parameters, the weather station also measures wind speed and direction, temperature (at 2 m and 10 m), solar radiation, relative humidity, rainfall, atmospheric pressure, and sigma theta. All data was captured during January 2019.</p>	No further recommendations as the site had a high percentage of data recording during the Audit period.

Schedule and Condition Number	Condition	Compliance Status	Evidence	Recommendations																																																												
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Parameter	Sampling method	Units of measure	Averaging period	Frequency																																																												
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M8.1	<p><b>Other Monitoring and Recording Conditions</b></p> <p>The Licensee must record the average PM<sub>10</sub> 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>	Administrative Non-Compliance	<p>Evidence of PM<sub>10</sub> results.</p> <p>According to the 2018 Annual Review: PM<sub>10</sub> was not monitored continuously at Point 1 during the reporting period, with capture rate being 99% or 362 days out of 365. Equipment malfunction and power outage were the primary cause of data loss. No pollution or environmental harm occurred as a result of the non-compliance. The site had a high percentage for recorded data.</p> <p>There were times during 2017 and 2019 where there was no data capture. It should be noted that this is a common issue for this equipment and the site has maintained a high data capture rate.</p>	<p>No further recommendations as the site had a high percentage of data recording during the Audit period.</p>																																																												

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Schedule and Condition Number	Condition	Compliance Status	Evidence	Recommendations
<b>Mining Leases</b>				
Nil non - compliance identified.				

## 7 Additional Recommended Actions

Additional recommendations relating to compliant conditions are outlined within **Table 10**.

**Table 10 Additional Recommendations**

Aspect	Recommendation
Water Management	<p><b>REC 4 Water Management</b></p> <p>See water management/erosion and sediment control table in <b>Section 5.4</b>. There is a total of 13 water management/erosion and sediment control recommendations.</p>
Noise Monitoring/Management	<p><b>REC 5 Noise Monitoring/Management</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; and</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>

Aspect	Recommendation
Blasting	<p><b>REC 6 Blasting</b></p> <p>R6.1: Any elevated blasting levels (ie. 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;115dBL 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 ie. '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>
Weed Management	<p><b>REC 7 – Weed Management</b></p> <p>Continue to implement additional weed management activities onsite.</p>
Aboriginal Heritage	<p><b>REC 8 – Aboriginal Heritage</b></p> <p>Continue the process of progressing the covenant for the Aboriginal Conservation Area.</p>
Visual and Community Management	<p><b>REC 9 – Visual and Community</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>



Aspect	Recommendation
Rehabilitation	<p><b>REC 10 - Rehabilitation</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>
Management Plans	<p><b>REC 11 – Management Plans</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>

## 8 Conclusion

SLR was endorsed as a suitably qualified, experienced and independent team of experts by the DPIE to conduct an Audit of the Mount Pleasant Operation under Development Approval (DA) 92/97 (as modified). The Audit assessed compliance against DA 92/97, EPL 20850, Mining Leases 1645, 1708, 1709, 1713 and 1750, and all associated management plans and strategies.

The Audit was conducted by Chris Jones (Audit Certification No. 120261) and Tracey Ball of SLR with a site visit undertaken between 25 and 27 February 2020, with a follow up site visit on 12 March 2020. Air quality specialist Ali Naghizadeh of SLR and noise, blast and vibration specialist Nathan Archer of SLR assisted in the desktop review.

The Audit consisted of a detailed desktop review, consultation with relevant agencies and the Community Consultative Committee, formal and informal interviews with Mount Pleasant Operation staff and a site inspection. The Audit was conducted to be consistent with Schedule 5 Condition 9 of DA 92/97.

The Audit generally identified a high level of compliance with no high or medium risks identified during the audit. Twelve were identified as low risk non-compliances. There were seven administrative non-compliances. It is noted that one visual dust incident on one day of the site visit equated for the majority of the low risk non-compliances. There were also some issues with waste management which has led to several non-compliances. Since the site visit, evidence has been provided by MACH Energy to rectify some of these non-compliances, including completion of an air quality toolbox for the Open Cut Examiners the evening of the site visit.

The site visit concluded that the Mount Pleasant Operation is generally compliant and well maintained, with highlights including:

- The use of a sophisticated system of real time monitoring for noise and air;
- Evidence of a detailed program between MACH Energy and the contractor to undertake landform design and shaping. This system is designed for sign off by all parties involved at the different steps in the rehabilitation process;
- Although there have been numerous complaints during the Audit period, evidence has been provided for the community engagement program to prevent and manage any community issues with the site;
- Compliance with noise and blasting criteria;
- Generally a high level of communication with major service contractors Thiess and Sedgman; and
- Evidence of continued interactions with surrounding mining operations.

# APPENDIX A

Photographs

## Appendix A.1– Air Quality Photographs



Photo Air 1- Haul Truck Dust Along Haulage Route



Photo Air 2 - Haul truck dust along haul route compared to area recently watered



Photo Air 3 -Dust generation from excavator staying within the pit floor



Photo Air 4 - Water trucks being effectively used on 26 February 2020 along the haulage route

## Appendix A.2– Biodiversity Photographs



Biodiversity Photo 1 - Galenia at site



Biodiversity Photo 2 - Prickly Pear at Site



**Biodiversity 3 - Likely footprints of feral cat or dog. Note evidence since provided of dog baiting in May 2020.**

## Appendix A.3– Erosion and Water Management Photographs



Erosion Photo 1 - Rill erosion in box cut area (near the carpark)



Erosion Photo 2 - Sediment fences within the drain may fail as sediment fences have been used in an area of concentrated flow





**Erosion Photo 3 - Rock lined drain near the pit top has failed and needs full redesign and rework**



**Erosion Photo 4 - Erosion along the roadway to the Train Load Out Area. Note – Evidence provided that erosion issue has been remediated, however maintenance is ongoing**



Erosion Photo 5 - Two power poles at site appear to be affected by erosion



Erosion Photo 6 - Erosion at CHPP



**Erosion Photo 7 - Erosion in the CHPP Area. Some works have completed since the site inspection (April 2020) but ongoing maintenance is required.**



**Erosion Photo 8 - Drainage Line behind the CHPP Area**



**Erosion Photo 9 - Erosion and sediment at the CHPP area**



**Erosion Photo 10 - Erosion within the fines emplacement area. Within the dirty water catchment.**



**Erosion Photo 11 - Erosion on road to the fines emplacement area. The photo was taken off the road to the decant pond, rather than to the fines emplacement area, and is wholly within the fines emplacement area.**



**Erosion Photo 12 - Erosion of the inside of the wall of the fines emplacement area**



Erosion Photo 13 - Erosion near the construction offices



Erosion Photo 14 - Erosion near construction offices



**Erosion Photo 15 - Blow out and erosion of rock drain on left hand side of the entrance road**



**Erosion Photo 16 - Erosion in the Mine Water Dam. Since the site inspection the area has been remediated**



**Water Management Photo 17- Fines disposal pipeline cross the cleanwater drain. Note, evidence provided since audit inspection of the installation end of line burst protection flow meters.**



**Erosion and Sediment Photo 18 - Some areas lacking vegetative cover in the clean water catchment. Note since the inspection evidence of some trees being**



## Appendix A.4– Rehabilitation Photographs



Rehabilitation Photo 1 - Topsoil Stockpiles to be seeded



Rehabilitation Photo 2 - Area recently shaped and seeded. Cover crop is well established



**Rehabilitation Photo 3 - Recently shaped and rehabilitated area**



**Rehabilitation Photo 4 - Area identified by MACH Energy to require additional rehabilitation works. Evidence provided that since the site inspection this area has been reworked**



Rehabilitation Photo 5 - Seeding is required in area above ED2 which is showing signs of erosion

## Appendix A.5– Waste and Hydrocarbon Management Photographs



Waste Photo 1 - Inpit storage area containing unbanded containers and bulky bins



Waste Photo 2- Inpit storage area- Incorrect waste segregation



**Waste Photo 3 - Inpit storage area containing oily rags not stored correctly**



**Waste Photo 4 - Workshop area - Gear oil not stored in bund**



Waste Photo 5 - Workshop area - Bulky bins not stored in bunds



Waste Photo 6- Workshop Area. 44 gallon drums containing oil have not been stored within bunds



**Waste Photo 7 - Construction offices. Drum not stored in bund. Contaminated soil has not been moved to the landfarm. Evidence provided since site inspection that this has been completed.**

# APPENDIX B

## Compliance Spreadsheets



<b>Development Consent (DA 92/97)</b>				
<b>Condition Number</b>	<b>Condition</b>	<b>Compliance Status</b>	<b>Evidence</b>	<b>Recommended Action</b>
<b>ADMINISTRATIVE CONDITIONS</b>				
<b>Obligation to minimise harm to the environment</b>				
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.	Compliant	Based on the information provided to SLR there have been no incidents which have triggered this condition (no material harm).  There was an issue where the filling of Environmental Dam 3 caused seepage of clean water to neighbouring Bengalla Coal Mine. There was a detailed investigation and mitigation measures implemented. SLR has been provided no evidence of a prosecution or PIN regarding the issue. MACH Energy liaised with DPIE as part of this audit and DPIE responded to MACH Energy on 25 March 2020 stating 'there is no further action is required in regards to this matter from the development consent perspective'.	
<b>Terms of Consent</b>				
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.  Notes: •The project layout plans are shown in Appendix 2. •The Statement of Commitments is reproduced in Appendix 3.	Compliant	Based on the evidence provided the site has generally been operated generally in accordance with the EIS's and project layout plans. Note activities under MOD 4 have not yet commenced. There have been some non compliances, however generally completed activities in accordance with these documents.	
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).	Compliant	a) Evidence of management plans, including correspondence with different government agencies. b) Generally the site has been consistent with mitigation measures in management plans. There are some further recommendations relating to implementation of management plans in this report.	
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.	Note	Noted	
<b>Limits on Consent</b>				
<b>Mining Operations</b>				
5	The Applicant may carry out mining operations on the site until 22 December 2026.  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 DRG. 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.	Compliant	Still within this period.	
<b>Coal Extraction</b>				
6	The Applicant must not extract more than 10.5 million tonnes of ROM coal from the site in a calendar year.	Compliant	2017 - 2.2Mt; 2018 - 6.5 Mt; 2019 - 5.97Mt  The site is still well within 2020 criteria. Evidence of daily tracking spreadsheets.	
<b>Coal Transport</b>				
7	Product coal may only be transported from the site by rail.	Compliant	Based on site communications all coal is delivered by rail.	
8	The Applicant must ensure that train movements at the site (ie arrival or dispatch) do not exceed: (a)a maximum of 18 per day; or (b)6 per day, averaged over each calendar year. Note: In this condition, "day" means any 24-hour period.	Compliant	Evidence of train movements spreadsheet on website. Well within the limits.	
<b>STRUCTURAL ADEQUACY</b>				
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. Notes: •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.	Compliant	Occupation certificate provided by 'Build Cert Consultants' dated 25 September 2018 titled 'Stage 1 - Early Works including earthworks and slab construction for administration and workshop buildings.  Construction of CHPP has not yet fully been completed. A certificate is planned for 2020.  Based on site communications other buildings are temporary and need no certificate.	
<b>DEMOLITION</b>				
10	The Applicant must ensure that all demolition work on site is carried out in accordance with AS 2601- 2001: The Demolition of Structures, or its latest version.	Compliant	A detailed filing system for demolition was provided to SLR for the audit. There were numerous farm houses and buildings demolished as part of the project. There are still several planned for demolition. Evidence of demolition certificates, asbestos surveys and demolition by specialists in accordance with AS 2600.	
<b>PROTECTION OF PUBLIC INFRASTRUCTURE</b>				
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.  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.	Compliant	Based on liaison with MACH Energy, there were no instances where the damage to public infrastructure from MACH Energy operations.  During the period, mine affected properties were vacated, and their electricity was disconnected. This included removal of associated power poles and wires services. MACH Energy incurred the full costs of these removals.	
<b>OPERATION OF PLANT AND EQUIPMENT</b>				

**Development Consent (DA 92/97)**

Condition Number	Condition	Compliance Status	Evidence	Recommended Action								
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.	Non-Compliant (Low Risk)	a) Detailed JDE Plant Maintenance Schedule provided to SLR. This included evidence of past servicing and future servicing. This includes dozers, frana cranes and light vehicles. There was also evidence of the Thiess Plant Maintenance Schedule. Evidence of realtime noise and air maintenance and calibration for PM10 monitors and noise monitors (Barn owls). Area of bitumen road along the light vehicle medium vehicle track has failed. This is general maintenance issue. b) <u>Non - Compliance for operations in a proper and efficient manner</u> - Based on the site inspection hauling of trucks was not being operated in a proper manner. SLR witnessed the overburden hauling of trucks from within the pit to the out of pit area around 12:30pm on 25 February 2020. During this time there was little use of watercarts. The watercart was only used on a small section of the haul route close to where the excavator was loading overburden into haul trucks. There was no speed reduction of haul trucks during the time of the site inspection. See Section 5 of the Audit Report for further details. Recommendations specifically relating to air quality are covered in other conditions. It should be noted however that 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. However despite this additional controls should have been installed. It is noted that no real time dust alarms were triggered at the time of the observations.	See other conditions for specific recommendations regarding dust. 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.								
<b>APPLICATION OF EXISTING STRATEGIES, PLANS OR PROGRAMS</b>												
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.	Compliant	All MOD 4 management plans have been approved.									
<b>PLANNING AGREEMENT</b>												
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.	Compliant	Evidence of VPA agreements. Letter dated 24 October 2018 from Muswellbrook Shire Council outlining contributions dating back to 2013. Also letter from Muswellbrook Shire Council in 2019.									
<b>EVIDENCE OF CONSULTATION</b>												
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.	Compliant	Evidence of consultation in the 'site versions' of management plans. These information is not provided in the website version. Evidence of consultation for acquisitions and implementing mitigation measures eg. Noise and air quality for the community.									
<b>COMPLIANCE</b>												
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.	Compliant	Evidence of Thiess Environmental Onboarding Presentation dated 2019. This is a detailed presentation outlining potential environmental impacts and the responsibilities of Thiess personnel as well as outlining key requirements of statutory approvals. Evidence of Training Management Plan Evidence of a select number of training records have been sighted.									
<b>APPLICABILITY OF GUIDELINES</b>												
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.	Noted										
<b>SCHEDULE 3 ENVIRONMENTAL PERFORMANCE CONDITIONS</b>												
<b>ACQUISITION UPON REQUEST</b>												
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.	Compliant	Based on liaison with MACH Energy, there was only one formal acquisition request received in 2016 with ongoing discussions into 2017 and 2018, with purchase in 2019. Evidence of hard copy file of the acquisition process. There are other landholders that favour the 'without prejudice process' MACH Energy talks to all properties with acquisition rights. MACH energy outlines the land holder can go through the formal pathway or the 'without prejudice pathway'.									
	<p><i>Table 1: Land subject to acquisition upon request</i></p> <table border="1"> <thead> <tr> <th>Basis</th> <th>Receiver</th> </tr> </thead> <tbody> <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>1</sup>, 21<sup>1</sup></td> </tr> </tbody> </table>	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>1</sup> , 21 <sup>1</sup>			
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	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.											
<b>ADDITIONAL MITIGATION UPON REQUEST</b>												
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.	Compliant	Several examples of mitigation upon requests. 5 completed mitigations. Covers houses from Table 1 and 2. Payment of electricity for several properties. Comfort hush installed for noise management. Evidence provided illustrating that MACH Energy are regularly liaising with the community									

## Development Consent (DA 92/97)

Condition Number	Condition	Compliance Status	Evidence	Recommended Action																																																																																																																																											
	<p><b>Table 2: Land where additional mitigation measures are available on request</b></p> <table border="1"> <thead> <tr> <th>Basis</th> <th>Receiver</th> </tr> </thead> <tbody> <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> </tbody> </table> <p>Note: 1 To identify the locations referred to in Table 2, see the figures in Appendix 5.</p>	Basis	Receiver	Noise	19, 20, 21, 68, 74, 77, 79, 80a, 84a, 86a, 139, 140a, 140c, 154, 203, 207, 257, 258, 259, 526																																																																																																																																										
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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.	Compliant	<p>MACH Energy have been within cumulative noise limits according to the noise reports.</p> <p>Global Acoustics define cumulative noise as <i>noise from MTP in conjunction with noise from one or more other mines. If MTP is inaudible or the only noise source, the measured cumulative noise is defined as 'Nil'</i>.</p> <p>It is noted that prior to January 2020 the monthly environmental reports (EPL Reporting) on the website did not provide details of compliance with cumulative criteria and little data on noise levels was detailed in the 2017 and 2018 Annual Reviews.</p> <p>There is insufficient detail regarding noise compliance and results within the 2017 and 2018 Annual Review. To obtain the specific details of the noise compliance status the reader has to review all the individual reports. The individual noise reports are not available on the MACH Energy website. Noise results are summarised in the Monthly Reports which are available on the website (starting May 2018).</p> <p>These issues were raised during the Audit site visit in February 2020 and appear to have been rectified in the 2020 Monthly reports and 2019 Annual Review dated April 2020.</p>	<p>REC: The monthly reports on the website should continue to report against how the site compared against the cumulative noise criteria.</p> <p>REC: 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; and</li> <li>- compliance against cumulative criteria.</li> </ul> <p><b>NOTE - these recommendation have been addressed in the 2019 Annual Review and Monthly Reports with this completed following the initial findings during the site inspection.</b></p>																																																																																																																																											
	<p><b>Table 5: Cumulative noise criteria dB(A) L<sub>max</sub> 1hr</b></p> <table border="1"> <thead> <tr> <th>Location</th> <th>Day</th> <th>Evening</th> <th>Night</th> </tr> </thead> <tbody> <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> </tbody> </table>	Location	Day	Evening	Night	NAG 8, 9	55	45	40	All other privately-owned land	50	45	40																																																																																																																																		
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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).	Compliant	Based on site communications all trains are ARTC or Aurizon trains. There is a contract with them regarding the fact that these trains must meet the Aurizon and ARTC trains. Any breach of this contract is the responsibility between ARTC and Aurizon.																																																																																																																																												
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	Compliant	<p>Evidence provided by MACH Energy and Thiess to manage noise.</p> <p>a) Evidence includes monitoring, implementation of additional noise management on residents, sound power level testing. b) Evidence of changing operations during temperature inversions. Evidence was provided in the MACH Energy 'Whats Ap' Group where the Open Cut Examiner (OCE) have posted changed operations based on potential temperature inversions. Evidence provided that in Winter 2019 there was no bulk shaping at night in rehabilitation areas. c) Evidence provided of the real time monitoring system which includes a system to predict areas where noise may be an issue in the upcoming 24 hours. It produces figures illustrating potential noise contours. This can be used to change operations and also investigate complaints. d) Evidence of cumulative management through regular meetings. Data sharing does sometimes occur but there is no requirement under the Development Consent.</p>																																																																																																																																												
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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: •ensure compliance with the noise criteria and operating conditions in this consent; •minimise rail noise (including wheel and brake squeal) to the greatest extent practicable; and •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); (c) include a noise monitoring program that: •uses a combination of real-time and supplementary attended monitoring to evaluate the performance of the development; •accounts for the occurrence of any noise enhancement between the site, and any sensitive receivers located beyond the site boundary; and •includes a protocol for determining exceedances of the relevant conditions of this consent. (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.	Compliant	<p><b>Preparation:</b> a) Evidence of submission on 27 June 2019 to DPIE. Evidence of consultation in the site version of the plan. b) Covered in Sections 7-10; c) Covered in Section 9; and d) Covered in Section 8.6.</p> <p><b>Implementation:</b> - Evidence of monitoring reports. The site has been compliant with noise criteria during the audit period. - Evidence of Sound Power Level testing - Thearle Engineering (14 October 2019). Also evidence of other sound power testing. - Evidence of real-time monitoring and predictive modelling system. See Section 5 of the main report for details. MACH Energy and Thiess can download sound files for real time monitoring. Actions are implemented if the mine is a source of the real time noise. - Records providing of changing operations. An example includes: Evidence from the CAT tool /27 Feb 2020 stating 'noise levels were green (under), however dozers working in exposed areas were instructed 'to use first gear only'. - There is cumulative noise management through regular meetings with Mount Arthur and Bengalla Mines. Also as per Section 8.6.1 of the Noise Management Plan for Cumulative Noise Management Protocol. - Based on site discussions - In winter – no bulk shaping at night in rehabilitation areas in 2019. Reduce impacts from temperature inversions. - Evidence of complaints management, including review of activities from complaints.</p>	REC: 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.																																																																																																																																											
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**Development Consent (DA 92/97)**

Condition Number	Condition	Compliance Status	Evidence	Recommended Action																				
	<p>The Applicant <b>must ensure that the blasting on the site does not cause exceedances of the criteria in Table 7.</b></p> <table border="1"> <caption>Table 7: Blasting criteria</caption> <thead> <tr> <th>Location</th> <th>Airblast overpressure (dB(Lin Peak))</th> <th>Ground vibration (mm/s)</th> <th>Allowable exceedance</th> </tr> </thead> <tbody> <tr> <td>Residence on privately owned land</td> <td>120</td> <td>10</td> <td>0%</td> </tr> <tr> <td>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> </tbody> </table> <p>Note: 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.</p>	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%	Compliant	<p>Review of Annual Review data.</p> <p>November and December 2017 within criteria; 2018 - Within criteria; 2019 - Overpressure for 1 blast was above 120 dBL, with this being recorded at 124.5 dBL on 21 October 2019 at the BV02 blast monitor. 1 blast above 115dBL however this was greater than 5% of the number of blasts in the twelve month period.</p> <p>The October 2019 monthly environmental report did not specifically address the overpressure reading being above 120dBL at BV02 on 21 October 2019. Following a study and detailed consultation with the DPIE, the DPIE concluded in a letter dated 7 February 2020 that 'the Department has determined that the blast did not cause exceedances of blasting criteria at any residence on privately owned land and therefore MACH Energy did not breach Schedule 3 Condition 10 of the Consent'.</p> <p>The November 2019 environmental monitoring report on the MACH Energy website did not note the elevated blast level of 117.8 DBL at BVOC location.</p> <p>Within year to date (2020) blasting criteria.</p> <p>The updated Blast Management Plan has been approved by DPIE, and is available on the MACH Energy website.</p>	<p>REC: Any elevated blasting levels (ie. 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>REC: Include a cumulative assessment of the percentage of blasts &gt;115dBL year to date to ensure &lt;5%</p>
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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.	Compliant	<p>November December 2017 - Within designated timeframe; 2018 - Within designated timeframe; 2019 - Within designated timeframe; Jan 2020 - Feb 2020 - Within designated timeframe.</p> <p>SLR viewed the Blast Summary spreadsheets which included blasting dates. The exact time of blasts was not recorded in the 2017 and 2018 Annual Reviews.</p>	<p>REC: 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. <b>NOTE - this has been addressed in the 2019 Annual Review.</b></p> <p>REC: 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>																				
<b>Blasting</b>																								
12	<p>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.</p> <p>This condition does not apply to blasts that generate ground vibration of 0.5 mm/s or less at any residence on privately-owned land, or to blasts required to ensure the safety of the mine or its workers.</p> <p>Note: For the purposes of this condition, a blast refers to a single blast event, which may involve a number of individual blasts fired in quick succession in a discrete area of the mine.</p>	Compliant	SLR viewed the Blast Summary spreadsheets. Within criteria of this condition.																					
<b>Property Inspections</b>																								
13	<p>If the Applicant receives a written request from the owner of any privately-owned land within 2 kilometres of the approved open cut mining pit/s on site, for a property inspection to establish the baseline condition of any buildings and/or structures on his/her land, or to have a previous property inspection report updated, then within 2 months of receiving this request the Applicant must: (c) commission a suitably qualified, experienced and independent person, whose appointment is acceptable to both parties, to: - establish the baseline condition of the buildings and/or structures on the land, or update the previous property inspection report; - identify any measures that should be implemented to minimise the potential blasting impacts of the development on these buildings and/or structures; and (d) give the landowner a copy of the new or updated property inspection report.</p> <p>If there is a dispute over the selection of the suitably qualified, experienced and independent person, or the Applicant or the landowner disagrees with the findings of the property inspection report, either party may refer the matter to the Secretary for resolution.</p>	Compliant	<p>Pre-blasting dilapidation reports carried out between December 2017 and January 2018 on private receptors within a 2 km radius of MPO.</p> <p>Evidence of several other Dilapidation Reports completed specialists engaged by MACH Energy in other areas Wybong Road, Sheppard Avenue and Racecourse Road in February 2020. These illustrated photos and description of dwellings by a specialist.</p> <p>SLR met with the MACH Energy team to discuss how blasting, dilapidation reports and community engagement was managed. Based on the information provided and site discussions it appears MACH Energy are meeting the obligations of this condition.</p>																					
<b>Property Investigations</b>																								
14	<p>If the owner of any privately-owned land claims that the buildings and/or structures on his/her land have been damaged as a result of blasting on site, then within 2 months of receiving this claim the Applicant must: (a) commission a suitably qualified, experienced and independent person, whose appointment is acceptable to both parties, to investigate the claim; and (b) give the landowner a copy of the property investigation report.</p> <p>If there is a dispute over the selection of the suitably qualified, experienced and independent person, or the Applicant or the landowner disagrees with the findings of the property investigation report, either party may refer the matter to the Secretary for resolution.</p> <p>If this independent property investigation confirms the landowner's claim, and both parties agree with these findings, then the Applicant must repair the damages to the satisfaction of the Secretary.</p> <p>If the Applicant or landowner disagrees with the findings of the independent property investigation, then either party may refer the matter to the Secretary for resolution.</p>	Compliant	<p>There have been queries and claims of damage from blasting.</p> <p>Evidence provided for structural reviews when a resident has requested the review. Evidence of reports that were provided to residents.</p>																					
<b>Blast Operating Conditions</b>																								
15	<p>The Applicant must: (a) implement best blasting management practice on site to: - protect the safety of people and livestock in the surrounding area; - protect public or private infrastructure/property in the surrounding area; - minimise the dust and fume emissions of the blasting on site; and - minimise blasting impacts on heritage items in the vicinity of the site; (b) co-ordinate the blasting on site with the blasting at nearby mines (including the Bengalla mine) to minimise the cumulative blasting impacts of the mines; and (c) operate a suitable system to enable the public to get up-to-date information on the proposed blasting schedule on site, to the satisfaction of the Secretary.</p>	Compliant	<p>Blasting is required to be undertaken in accordance with the Blast Management Plan.</p> <p>a) Evidence of blasting results from Annual Review.</p> <p>No evidence of impacts of people, property or livestock. No evidence of impacts on heritage items, with none within the blast exclusion zones.</p> <p>It appears there has been no major issues with blasting fumes based on discussions with site and the review of incident and complaints logs.</p> <p>b) Evidence of co-ordination of blasts with Bengalla through blasting notification emails.</p> <p>c) Blasting schedule for the site. Evidence provided of notification of blasts. Evidence on the website of blast scheduling for each upcoming week. With this noting the proposed time of the blast and whether there is a road closure. It is noted that the Blast Scheduling pdfs are located within the 'Management Plans and Reporting' section of the website, which is not an obvious location. See recommendation. Also evidence of notification via the Muswellbrook Shire Council website.</p> <p><a href="https://www.muswellbrook.nsw.gov.au/index.php/blasting/blasting-announcements">https://www.muswellbrook.nsw.gov.au/index.php/blasting/blasting-announcements</a></p>	<p>REC: Ensure the Blast Scheduling information is available on the home page by a simple link ie. 'Upcoming Blasting'. It is not obvious to find the blast scheduling information on the current website.</p> <p>REC: Results of blast fume monitoring should be included in monthly reports and the Annual Review</p>																				
16	<p>The Applicant must not undertake blasting within 500 metres of: (a) a public road without the approval of Council; and (b) any land outside the site not owned by the Applicant, unless: - the Applicant has a written agreement with the relevant landowner to allow blasting to be carried out closer to the land, and the Applicant has advised the Department in writing of the terms of this agreement, or - the Applicant has: o demonstrated to the satisfaction of the Secretary that the blasting can be carried out closer to the land without compromising the safety of the people or livestock on the land, or damaging the buildings and/or structures on the land; and o updated the Blast Management Plan to include the specific measures that would be implemented while blasting is being carried out within 500 metres of the land.</p>	Compliant	<p>a) There is a Section 138 notice with council to allow for blasting within the 500m. Evidence of emails noting closure of Wybong Road for 15 minutes for blasting operations. Example of an email dated 15 October at 10:33am for a 3pm blast.</p> <p>b) There is an agreement with Bengalla. Also evidence of regular catchups and notifications of blasts.</p>																					

**Blast Management Plan**

# Development Consent (DA 92/97)

Condition Number	Condition	Compliance Status	Evidence	Recommended Action																													
17	<p>The Applicant must prepare a Blast Management Plan for the development to the satisfaction of the Secretary. This plan must:</p> <ul style="list-style-type: none"> <li>(a) be submitted to the Secretary for approval prior to carrying out any blasting on site;</li> <li>(b) describe the measures that would be implemented to ensure compliance with the relevant conditions of this consent;</li> <li>(c) include a road closure management plan, prepared in consultation with Council;</li> <li>(d) include a blast monitoring program for evaluating compliance with the relevant conditions of approval; and</li> <li>(e) include a protocol that has been prepared in consultation with the owners of nearby mines (including the Bengalla mine) for minimising and managing cumulative blasting impacts of the mines.</li> </ul> <p>The Applicant must implement the management plan as approved by the Secretary.</p>	Compliant	<p><u>Preparation:</u></p> <ul style="list-style-type: none"> <li>a) DPIE have approved the most recent Blast Management Plan on 14 January 2019. Original approval prior to this Audit period;</li> <li>b) Sections 6, 9 and 11;</li> <li>c) Appendix B. Includes evidence of consultation. Details of road closure process included in the Blast Management Plan;</li> <li>d) Sections 10 (Blast Monitoring Program) and 13;</li> <li>e) Section 9.5.3. Includes details of pre blast and during blast management.</li> </ul> <p><u>Implementation:</u></p> <ul style="list-style-type: none"> <li>* Blast monitoring results outlined in Annual Review and monthly reports.</li> <li>* Actions following potential non-compliances - evidence of consultation with DPIE when the blast was above 120dBA. This was proven to be compliant following letter from DPIE on 7 February 2020.</li> <li>* Evidence of response to complaints for blasting. Complaints log. Meeting with External Relations Officer illustrates that MACH Energy has visited properties during blasting events. There are a series of internal blasting monitors as well to gain more information about blasts.</li> </ul>																														
<b>AIR QUALITY &amp; GREENHOUSE GAS</b>																																	
<b>Odour</b>																																	
18	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.	Compliant	<p>Review of complaints log.</p> <p>One noise / odour complaint from Collins Lane on 20 February 2020.</p> <p>Preliminary assessment by the MACH Energy indicates the odour was not from MACH Energy. No reason to determine this as a non - compliance.</p>																														
<b>Greenhouse Gas Emissions</b>																																	
19	The Applicant must implement all reasonable and feasible measures to minimise the release of greenhouse gas emissions from the site.	Compliant	Evidence of recording of greenhouse data. No issues identified from the audit.																														
<b>Air Quality Criteria</b>																																	
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> <p><i>Table 8: Long term criteria for particulate matter</i></p> <table border="1"> <thead> <tr> <th>Pollutant</th> <th>Averaging Period</th> <th>Criterion</th> </tr> </thead> <tbody> <tr> <td>Total suspended particulate (TSP) matter</td> <td>Annual</td> <td>500 µg/m<sup>3</sup></td> </tr> <tr> <td>Particulate matter &lt; 10 µm (PM<sub>10</sub>)</td> <td>Annual</td> <td>50 µg/m<sup>3</sup></td> </tr> <tr> <td>Particulate matter &lt; 2.5 µm (PM<sub>2.5</sub>)</td> <td>Annual</td> <td>25 µg/m<sup>3</sup></td> </tr> </tbody> </table> <p><i>Table 9: Short term criteria for particulate matter</i></p> <table border="1"> <thead> <tr> <th>Pollutant</th> <th>Averaging Period</th> <th>Criterion</th> </tr> </thead> <tbody> <tr> <td>Particulate matter &lt; 10 µm (PM<sub>10</sub>)</td> <td>24 hour</td> <td>500 µg/m<sup>3</sup></td> </tr> <tr> <td>Particulate matter &lt; 2.5 µm (PM<sub>2.5</sub>)</td> <td>24 hour</td> <td>250 µg/m<sup>3</sup></td> </tr> </tbody> </table> <p><i>Table 10: Long term criteria for deposited dust</i></p> <table border="1"> <thead> <tr> <th>Pollutant</th> <th>Averaging Period</th> <th>Maximum increase in deposited dust level</th> <th>Maximum total deposited dust level</th> </tr> </thead> <tbody> <tr> <td>Deposited dust</td> <td>Annual</td> <td>5g/gm<sup>2</sup>/month</td> <td>5g/gm<sup>2</sup>/month</td> </tr> </tbody> </table> <p><i>Notes to Tables 8-10:</i></p> <ul style="list-style-type: none"> <li>* Total annual i.e. incremental increase in concentrations due to the development plus background concentrations due to all other sources.</li> <li>** Incremental limit i.e. incremental increase in concentrations due to the development on its own.</li> <li>† Deposited dust is to be assessed as in-situ solids as defined by Standards Australia, AS/NZS 5557:01 (2002) Methods for Sampling and Analysis of Ambient Air - Determination of Particulate Matter - Deposited Matter - Gravimetric Method, and</li> <li>‡ Exclude exceptional events such as bushfires, prescribed burning, dust storms, sea fog, the incidents or any other activity approved by the Secretary.</li> </ul>	Pollutant	Averaging Period	Criterion	Total suspended particulate (TSP) matter	Annual	500 µg/m <sup>3</sup>	Particulate matter < 10 µm (PM <sub>10</sub> )	Annual	50 µg/m <sup>3</sup>	Particulate matter < 2.5 µm (PM <sub>2.5</sub> )	Annual	25 µg/m <sup>3</sup>	Pollutant	Averaging Period	Criterion	Particulate matter < 10 µm (PM <sub>10</sub> )	24 hour	500 µg/m <sup>3</sup>	Particulate matter < 2.5 µm (PM <sub>2.5</sub> )	24 hour	250 µg/m <sup>3</sup>	Pollutant	Averaging Period	Maximum increase in deposited dust level	Maximum total deposited dust level	Deposited dust	Annual	5g/gm <sup>2</sup> /month	5g/gm <sup>2</sup> /month	Administrative Non-Compliance	<p>Data reviewed during the Audit period. There has been some exceedances, however evidence has been provided to ensure these are not non - compliances. However administrative non - compliances for full data capture.</p> <p>There were regional dust events nominated by the DPIE with these being excluded. There have also been 'bushfire events' which have been excluded by DPIE.</p> <p><u>Admin Non - Compliance</u> for data capture.</p> <p>There was a malfunction APF4 in 2018. With this resulting in hiring a TEOM. This resulted in some lost data. However APF4 is an internal monitor.</p> <p>PM10 was not monitored continuously at Point 1 during the reporting period, with capture rate being 99% or 362 days out of 365. Equipment malfunction and power outage were the primary cause of data loss.</p> <p>The 2019 Annual Review stated that:</p> <p><i>During the reporting period, it was identified that PM2.5 monitoring results were consistently higher than would be expected. An investigation (with co-located TEOM monitoring) determined that the calibration factor being applied to the raw PM2.5 and PM10 measurements was incorrect (i.e. was overstating particulate levels). A letter describing the investigation and outcomes is provided in Appendix D of the 2019 Annual Review. The data presented in this document therefore applies the new calibration factors determined for PM2.5 and PM10. Consistent with advice from the technical specialist who conducted the investigation, the new calibration factors have also been applied to data from previous years (including the 2018 data presented in this Annual Review).</i></p>	There is no specific recommendation as data capture was quite high during the Audit period.
Pollutant	Averaging Period	Criterion																															
Total suspended particulate (TSP) matter	Annual	500 µg/m <sup>3</sup>																															
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Deposited dust	Annual	5g/gm <sup>2</sup> /month	5g/gm <sup>2</sup> /month																														
21	Deleted																																
<b>Air Quality Operating Conditions</b>																																	
22	<p>22. The Applicant must:</p> <ul style="list-style-type: none"> <li>(a) implement best practice air quality management, including all reasonable and feasible measures to minimise the odour, fume and dust emissions of the development;</li> <li>(b) minimise visible air pollution generated by the development;</li> <li>(c) minimise, where reasonable and feasible, the extent of potential dust generating surfaces exposed on the site at any given point in time;</li> <li>(d) minimise the air quality impacts of the development during adverse meteorological conditions and extraordinary events (see Note d above under Tables 8-10);</li> <li>(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</li> <li>(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.</li> </ul>	Non-Compliant (Low Risk)	<p>a) <u>Non Compliance - field evaluation.</u> Air quality issues identified during the audit. See Section 5.3 of the report for further details. Issues relating to dust from haul roads in the pit circuit and dust from the Excavator dumping overburden into the truck. The lack of a water truck when viewing into the BC pit on 25 February 2020 across the majority of the haulage route was not best practice. The dust was also above the visual assessment levels in the EPA Dust Assessment Handbook 2019 and additional mitigation measures should have been implemented.</p> <p>b) Mitigation measures outlined in the Air Quality and Greenhouse Gas Management Plan.</p> <p>c) It appears that clearing is limited to the areas required for operations.</p> <p>d) and e) This included records of shut down days and changed operations. Evidence of using the air quality prediction system to plan operations around reducing air quality impacts. SLR requested records from several hot and windy days during the audit period and detailed hourly breakdowns of any changes to the Thies operations were provided</p> <p>MACH Energy received an official caution on 17 December 2019 as a shutdown on 24 October 2019 had exceeded the allowable 1 hour timeframe by 20 minutes. Whilst operations ceased within the hour (12:30pm), one haul truck continued until 12:34pm and three other haul trucks were reported to have continued hauling operations up until 12:50pm. MACH Energy has since implemented a procedure to ensure the site meets the timing requirements of shutdown conditions. With regards to shutdown the non - compliance relates to the EPL condition for shut down, not the condition e) of this consent. As condition e) refers to 'compliance with conditions of consent' i.e. Schedule 3 Condition 20 criteria.</p> <p>f) Evidence of regular meetings between sites. Data sharing if required between the sites, but there are no joint monitoring between operations.</p>	<p>Recommend reviewing the way dust is visually assessed with this based on the EPA's new Dust Management Handbook 2019.</p> <p>Increased training in visual dust management at site. This should be regularly discussed and documented in toolbox talks.</p> <p>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 (eg. Reduction in speed) or operations are to cease until adequate dust controls are available.</p> <p>Update the MOP to include a defined timeframe to revegetate soil stockpiles.</p> <p>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>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>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>																													
<b>Air Quality and Greenhouse Gas Management Plan</b>																																	

**Development Consent (DA 92/97)**

Condition Number	Condition	Compliance Status	Evidence	Recommended Action
23	<p>The Applicant must prepare an Air Quality and Greenhouse Gas Management Plan for the development to the satisfaction of the Secretary. This plan must:</p> <p>(a) be submitted to the Secretary for approval prior to carrying out any development on site;</p> <p>(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;</p> <p>(c) include an air quality monitoring program that:</p> <p>uses a combination of real-time monitors and supplementary monitors to evaluate the performance of the development;</p> <p>includes PM2.5 monitoring (although this obligation could be satisfied by the regional air quality monitoring network if sufficient justification is provided);</p> <p>includes a protocol for determining exceedances of the relevant conditions of this consent; and</p> <p>(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.</p> <p>The Applicant must implement the management plan as approved by the Secretary.</p>	Non-Compliant (Low Risk)	<p><u>Preparation:</u></p> <p>a) Date prior to the Audit period;</p> <p>b) Section 7-11;</p> <p>c) Section 1 illustrates monitoring program.</p> <p>d) Section 9.8.</p> <p><u>Implementation:</u></p> <p>The mitigation measures within the AQMP have been assessed for implementation.</p> <p><u>Non-compliance</u> with the AQMP in terms of watering of haul roads. Section 9.2 of the AQMP states: <i>Watercarts will be utilised as necessary to minimise excessive visible dust.</i></p> <p>Air quality issues identified during the site inspection component of the audit. See Section 5.3 of the report for further details. Issues relating to dust from haul roads in the pit circuit and dust from the excavator dumping overburden into the haul truck. The lack of a watercart when viewing into BC pit on 25 February 2020 across the majority of the haulage route was not evidence of best practice. The dust was also above the visual assessment levels in the EPA Dust Assessment Handbook 2019 and additional mitigation measures should have been implemented.</p> <p>It should be noted however that 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. However despite this additional controls should have been installed. It is noted that no real time dust alarms were triggered at the time of the observations.</p> <p>It was noted during the site inspection that some areas of soil stockpiles have not yet been seeded. These should be seeded. It is noted that the current commitment in the AQMP does not designate a timeframe for seeding of stockpiles.</p> <p><i>Long-term stockpiles will be revegetated as soon as practicable following completion.</i></p> <p>Also see the wording in Schedule 3 Condition 22 regarding the shutdown issue on day on 24 October 2019.</p>	<p>Recommend reviewing the way dust is visually assessed with this based on the EPAs new Dust Management Handbook 2019.</p> <p>Increased training in visual dust management at site. This should be regularly discussed and documented in toolbox talks.</p> <p>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 (eg. Reduction in speed) or operations are to cease until adequate dust controls are available.</p> <p>Update the MOP to include a defined timeframe to revegetate soil stockpiles.</p> <p>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>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>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>
<b>METEOROLOGICAL MONITORING</b>				
24	<p>For the life of the development, the Applicant must ensure that there is a meteorological station operating in the vicinity of the site that:</p> <p>(a) complies with the requirements in the Approved Methods for Sampling of Air Pollutants in NSW guideline; and</p> <p>(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.</p>	Administrative Non-Compliance	<p>Monthly report by Ecotech.</p> <p>There has been some downtime for certain sensors during the audit period which has resulted in a small loss of data. This constitutes an admin non-compliance but this is consistent with most other mine sites. It should be noted there are two meteorological stations at site and it is unlikely that both would be down at the same time.</p> <p>Evidence of meteorological system with monthly reports.</p> <p>Evidence of live weather system with alarms going to Ecotech.</p>	No further recommendation as there was only a minor loss of data.
<b>SOIL &amp; WATER</b>				
Note:	Under the Water Act 1912 and/or the Water Management Act 2000, the Applicant is required to obtain water licences for the development.	Note	Noted	
<b>Water Supply</b>				
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.	Compliant	Based on water balances and discussions with site there has been enough water at site during even during the dry times. Use of water licences for water extraction.	
<b>Water Discharges</b>				
26	The Applicant must ensure that any surface water discharges from the site comply with the: <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>	Compliant	Based on feedback from MACH Energy there were no discharges during the Audit period. No discharges recorded in the Annual Review.	
<b>Compensatory Water Supply</b>				
27	<p>The Applicant must provide compensatory water supply to any landowner of privately-owned land whose water entitlements are adversely and directly impacted (other than an impact that is negligible) as a result of the development, in consultation with DoI Water, and to the satisfaction of the Secretary.</p> <p>The compensatory water supply measures must provide an alternative long-term supply of water that is equivalent, in quality and volume, to the loss attributed to the development. Equivalent water supply should be provided (at least on an interim basis) as soon as practicable after the loss is identified, unless otherwise agreed with the landowner.</p> <p>If the Applicant and the landowner cannot agree on the measures to be implemented, or there is a dispute about the implementation of these measures, then either party may refer the matter to the Secretary for resolution.</p> <p>If the Applicant is unable to provide an alternative long-term supply of water, then the Applicant must provide alternative compensation to the satisfaction of the Secretary.</p>	Compliant	Based on feedback from MACH Energy there were no requests for compensatory water supply during the Audit period. Nothing recorded in the Annual Review.	
<b>Water Management Plan</b>				
28	<p>The Applicant must prepare a Water Management Plan for the development to the satisfaction of the Secretary. This plan must be prepared in consultation with DoI Water and EPA, and be submitted to the Secretary for approval by 30 June 2019, unless otherwise agreed by the Secretary. The plan must include:</p> <p>(a) a Site Water Balance, which must:</p> <ul style="list-style-type: none"> <li>include details of: <ul style="list-style-type: none"> <li>sources and security of water supply;</li> <li>water use on site;</li> <li>water management on site;</li> <li>any off-site water transfers; and</li> </ul> </li> <li>investigate and implement all reasonable and feasible measures to minimise water use by the development;</li> </ul> <p>(b) an Erosion and Sediment Control Plan, which must:</p> <ul style="list-style-type: none"> <li>identify activities that could cause soil erosion, generate sediment or affect flooding;</li> <li>describe measures to minimise soil erosion and the potential for the transport of sediment to downstream waters, and manage any flood risk;</li> <li>describe the location, function, and capacity of erosion and sediment control structures;</li> <li>describe what measures would be implemented to maintain the structures over time;</li> </ul> <p>(c) a Surface Water Management Plan, which must include:</p> <ul style="list-style-type: none"> <li>detailed baseline data on surface water flows and quality in creeks and other waterbodies that could potentially be affected by the development;</li> <li>surface water and stream health impact assessment criteria including trigger levels for investigating any potentially adverse surface water impacts;</li> <li>a program to monitor and maintain the bridge openings and culverts associated with the MOD 4 rail infrastructure and ensure that they remain clear of blockages;</li> <li>a program to monitor surface water flows and quality in the watercourses that could be affected by the project; and</li> <li>reporting procedures for the results of the monitoring program;</li> </ul>	Compliant	<p><u>Preparation:</u></p> <p>a) The Water Management Plan has been approved by DPIE with this dated 31 October 2019. Water Management Plan was submitted to DPIE on 28 June 2019. See Appendix 1 meets requirement of the condition.</p> <p>b) See Appendix 2</p> <p>c) See Appendix 3.</p> <p><u>Implementation:</u></p> <p>Seepage issue is further outlined in <b>Section 5.4</b> of the report.</p> <p>2018 Annual Review stated: <i>"Filling of Environmental Dam 3 caused seepage of clean water to neighbouring Bengalla Coal Mine. In May 2018, MPO were advised that seepage had been noted at Bengalla Coal Mine. MACH Energy and Bengalla Coal Mine are jointly undertaking engineering and hydrogeological reviews to determine the source of the seepage. No pollution or environmental harm occurred as a result of the non-compliance"</i></p> <p>There was a detailed investigation into the incident. Based on discussions with MACH Energy there has been no official cautions or PINs regarding the seepage issue. Evidence was provided of a letter from MACH Energy to DPIE on 20 March 2020 requesting the matter to be closed out. MACH Energy outlined the following to DPIE in the 20 March 2020 letter:</p> <p><i>"Following the investigations, MACH Energy has fully lined Environmental Dam 3 (i.e. with placed clay and geofabric), and has also lined the main Mine Water Dam to minimise the potential for seepage related to the ongoing operation of these storages. MACH Energy has also ensured all relevant and available monitoring information from both Environmental Dam 3 and Bengalla Mine is now considered in ongoing water management practices at the Mount Pleasant Operation"</i></p> <p>DPIE responded to MACH Energy on 25 March 2020 stating 'there is no further action is required in regards to this matter from the development consent perspective'.</p> <p>Evidence of water monitoring data and stream health monitoring. Monitoring for stream health every six months.</p> <p>Evidence of some erosion and sediment water management issues on site with this outlined in Section 5.4 of the Main report. These mostly related to erosion of drainage lines, erosion of bunds and dam walls. Although there are improvements required the site inspection did not indicate any areas where 'dirty water' is leaving site.</p>	REC: There are a selection of proposed water management and erosion and sediment upgrades with these outlined in Section 5.4.

**Development Consent (DA 92/97)**

Condition Number	Condition	Compliance Status	Evidence	Recommended Action
	<p>(d) a Groundwater Management Plan, which must include:</p> <ul style="list-style-type: none"> <li>• detailed plans, including design objectives and performance criteria, for the design and management of the proposed final voids;</li> <li>• detailed baseline data of groundwater levels, yield and quality in the region, and privately-owned groundwater bores, that could be affected by the development;</li> <li>• groundwater impact assessment criteria including trigger levels for investigating any potentially adverse groundwater impacts;</li> <li>• a program to monitor and assess:                             <ul style="list-style-type: none"> <li>o groundwater inflows to the mining operations;</li> <li>o impacts on regional and local (including alluvial) aquifers;</li> <li>o impacts on the groundwater supply of potentially affected landowners;</li> <li>o impacts on groundwater dependent ecosystems and riparian vegetation;</li> </ul> </li> <li>(e) a Surface and Ground Water Response Plan, which must include:                             <ul style="list-style-type: none"> <li>• a response protocol for any exceedances of the surface water and groundwater assessment criteria;</li> <li>• measures to offset the loss of any baseflow to watercourses caused by the development;</li> <li>• measures to prevent, minimise or offset groundwater leakage from alluvial aquifers caused by the development;</li> <li>• measures to compensate landowners of privately-owned land whose water supply is adversely affected by the development; and</li> <li>• measures to mitigate and/or offset any adverse impacts on groundwater dependent ecosystems or riparian vegetation.</li> </ul> </li> </ul> <p>The Applicant must implement the management plan as approved by the Secretary.</p>	Compliant	<p><u>Preparation:</u>                      d) See Appendix 4.                      e) See Appendix 5.</p> <p><u>Implementation:</u>                      Evidence of groundwater monitoring.                      MACH Energy had to implement the groundwater response plan based on the groundwater trigger levels. This was based on the drought. The Water Management Plan was revised based on new triggers. Covered in the 2018 Annual Review.</p> <p><i>In accordance with the SGWRP, these consecutive exceedances triggered the Groundwater Quality Response Protocol. The outcomes of the protocol were a recommendation by HydroSimulations for the trigger levels to be refined to more accurately reflect variation in water quality due to outside influences.</i></p>	
28A	<p>The Applicant must decommission the existing water supply infrastructure within the rail loop and infrastructure corridor, including the associated pump station, within 6 months of the commissioning of the MOD 4 water infrastructure.</p> <p>Notes:                      •The existing rail loop and infrastructure corridor is shown in Figure 3 of Appendix 2.                      •The decommissioning of infrastructure within the rail loop and infrastructure corridor is also controlled under condition 37 of Schedule 3</p>	Not Triggered	Still in final design stage to build the new rail loop.	
28B	<p>The Applicant must notify DoI Water, in writing, within 14 days of completing the following:                      (a) the commissioning of the MOD 4 water infrastructure; and                      (b) the decommissioning of existing water supply infrastructure within the rail loop and infrastructure corridor.</p>	Not Triggered	Still in final design stage to build the new rail loop.	

**BIODIVERSITY**

**Biodiversity Management Plan**

32	<p>The Applicant must prepare a Biodiversity Management Plan for the development to the satisfaction of the Secretary. This plan must:</p> <p>(a) be prepared in consultation with OEH and Council, and be submitted to the Secretary for approval by 30 June 2019, unless otherwise agreed by the Secretary;</p> <p>(b) include:</p> <ul style="list-style-type: none"> <li>• a description of the short, medium, and long term measures that would be implemented to:                             <ul style="list-style-type: none"> <li>- manage the remnant vegetation and habitat on the site; and</li> <li>- avoid and manage remnant vegetation and habitat within the relinquishment area;</li> </ul> </li> <li>• a detailed description of the measures that would be implemented over the next 3 years, including the procedures to be implemented for:                             <ul style="list-style-type: none"> <li>- implementing revegetation and regeneration within the disturbance areas, including establishment of canopy, sub-canopy (if relevant), understorey and ground strata;</li> <li>- maximising salvage and beneficial use of resources in areas that are to be impacted, including vegetative, soil and cultural heritage resources;</li> <li>- protecting vegetation and soil outside the disturbance areas;</li> <li>- rehabilitating creeks and drainage lines on the site, to minimise net loss of stream length and aquatic habitat;</li> <li>- managing salinity;</li> <li>- conserving and reusing topsoil;</li> <li>- undertaking pre-clearance surveys;</li> <li>- managing impacts on fauna;</li> <li>- landscaping the site and along public roads to minimise visual and lighting impacts;</li> <li>- collecting and propagating seed;</li> <li>- salvaging and reusing material from the site for habitat enhancement;</li> <li>- salvaging, transplanting and/or propagating threatened flora and native grassland;</li> <li>- controlling weeds and feral pests;</li> <li>- managing grazing and agriculture on site;</li> <li>- controlling access; and</li> <li>- bushfire management;</li> </ul> </li> <li>• a program to monitor and report on the effectiveness of these measures, and progress against the performance and completion criteria;</li> <li>• a description of the potential risks to successful revegetation, and a description of the contingency measures that would be implemented to mitigate these risks; and</li> <li>• details of who would be responsible for monitoring, reviewing, and implementing the plan.</li> </ul> <p>The Applicant must implement the management plan as approved by the Secretary.</p>	Compliant	<p><u>Preparation:</u>                      a) The most recently approved version of the Biodiversity MP was approved on 31 October 2019. This document has been reviewed as part of the Audit. Evidence of consultation provided in Section 1.1.2 of the MP. Includes consultation for MOD 4. Appendix A provides key correspondence.                      b) The key aspects of the dot points in this condition have been covered in Section 6-10 of the approved Biodiversity MP. The document is also set out with cross referencing tables outlining where sub conditions have been covered.</p> <p><u>Implementation:</u>                      Evidence of pre - clearing survey report prepared by Naria Environmental covering 2017-2019. Report dated August 2019. Includes mapping of ecological features. Includes evidence of stag tree and threatened flora and fauna management. Also evidence provided for several separate reports.                      Evidence of weed spraying marked up figure by Enright Weed Spraying dated 27 September 2019. This mostly focussed along roads and site boundaries. Receipts of weed spraying were sighted.                      Evidence of Tiger Orchid Translocation Report by Naria Environmental dated July 2019. Section 4.3.5 of the MPO Biodiversity Management Plan (BoiMP) states "that if disturbance cannot be modified, the Tiger Orchid (<i>Cymbidium canaliculatum</i>) will be salvaged prior to disturbance and relocated to proximal, suitable habitats in non-disturbance areas". The July 2019 report provides an update on the condition of the 5 translocated Tiger Orchids. All appear healthy.                      Evidence provided for tree seed salvage. Evidence of trees being used in rehabilitation.</p> <p><u>Field evidence</u>                      Some areas of weeds observed onsite ranging from minor to moderate. Evidence of weed management program in place however further work is required. SLR notes evidence provided since audit inspection of Q1 and Q2 weed management program being completed.</p>	REC: Continue to implement additional weed management activities onsite.
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**HERITAGE**

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.			
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**Aboriginal Heritage Conservation Strategy**

## Development Consent (DA 92/97)

Condition Number	Condition	Compliance Status	Evidence	Recommended Action
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 OEH 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>	Observation	<p><u>Preparation and Implementation:</u></p> <p>The Aboriginal Heritage Conservation Strategy forms Section 5 of the ACHMP. Most recent ACHMP was approved by DPIE on 31 October 2019. Evidence of consultation with RAP's on July 18 and 19, 2019.</p> <p>a) A revised version of this AHMP/Strategy was prepared on behalf of MACH Energy by Peter Kuskie of South East Archaeology and was approved by the Secretary of the Department of Planning and Environment on 5 July 2017. Consultation was undertaken with the OEH and the RAPs in accordance with Development Consent DA 92/97.</p> <p>b) Included in overarching ACHMP. Section 1.3. Consultation for 2019 update.</p> <p>c) Original construction and operation activities completed at site prior to this audit period. Management Plan updated for MOD 4 works.</p> <p>d) <u>Observation:</u> Based on discussions with MACH Energy there has been multiple discussions about getting the conservation area under a covenant with the OEH. There has been little feedback regarding this. DPIE and OEH have been liaising regarding the governments responsibility. Letter from 3 July 2019 from MACH Energy to DPIE trying to progress the covenant.</p> <p>e) Section 5.4 of the ACHMP provides an update on the long term security.</p> <p>f) Section 5.3.</p>	REC: Continue the process of progressing the covenant for the Aboriginal Conservation Area.
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.			
34	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.	Observation	<p>Section 5.4 of the ACHMP provides an update on the long term security.</p> <p>In accordance with Condition 34, Schedule 3 of Development Consent DA 92/97, within 2 years of the approval of the Aboriginal Heritage Conservation Strategy, MACH Energy will demonstrate to the satisfaction of the Secretary of the DPIE that it has made suitable arrangements to provide appropriate long-term security for the Aboriginal Heritage Conservation Areas.</p> <p>In this regard, it is noted that correspondence from the Department of Planning and Environment dated 14 July 2016 stated the following in relation to the Aboriginal Heritage Conservation Areas:</p> <p><i>In light of the above, the Department is generally satisfied with the proposed staged approach for establishing the modified Broomfield Conservation Area.</i></p> <p>Based on discussions with MACH Energy there has been multiple discussions about getting the conservation area under a covenant with the OEH. There has been little feedback regarding this. DPIE and OEH have been liaising regarding the governments responsibility. Letter from 3 July 2019 from MACH Energy to DPIE trying to progress the covenant.</p>	As per Schedule 3 Condition 33 recommendation.
<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 OEH, 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>	Compliant	<p>This condition is prior to the audit period. The ACHMP states:</p> <p><i>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.</i></p>	
<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 OEH 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>	Compliant	<p><u>Preparation:</u></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><u>Implementation:</u></p> <p>Evidence of inductions relating to heritage items in MACH Energy, Thiess and Sedgmans.</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>	See recommendation from Schedule 3 Condition 33 about implementing the covenant.
Notes:	<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 OEH 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 OEH for inclusion on the Aboriginal Heritage Information Management System database.</li> </ul>	Noted	Noted. ACHMP appears to meet the requirements of OEH.	
<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>	Not Triggered	This corridor is still active. Condition not triggered.	
Note	The rail loop and infrastructure corridor is shown in Figure 3 of Appendix 2.			
<b>Road Works</b>				
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.			
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>	Compliant	<p>Based on site communications all roads are Council Roads.</p> <p>A Road Works Schedule document was provided to SLR dated June 2019.</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>	
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 RMS.</p> <p>If there is any dispute between the Applicant and Council or RMS in relation to the funding or upgrade works, then any of the parties may refer the matter to the Secretary for resolution.</p>	Compliant	<p>A Road Works Schedule document was provided to SLR dated June 2019.</p> <p>a) Mount Pleasant 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>	



## Development Consent (DA 92/97)

Condition Number	Condition	Compliance Status	Evidence	Recommended Action
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.	Not Triggered	Not yet 2022  A Road Works Schedule document was provided to SLR dated June 2019. a) Commence works Late 2019, to be completed 2021 b) Current planning includes a rail overbridge crossing Overton and Wybong Roads. Commence works Late 2019, completed 2021. c) Current planning enables crossing of Overton Road without realignment.	
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.	Compliant	Evidence sighted of letter from 26 June 2019.  Evidence sighted of June 2018 letter.	
<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.	Compliant	Evidence of road maintenance plan dated April 2019 with this signed by MACH Energy and Council. The plan outlines assets and maintenance. Based on site inspection there were no issues.  Minor evidence of maintenance including litter picks ups, removal of dead fauna, removal of any mud.	
<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.	Compliant	Evidence of road maintenance contributions from 2018 and 2019. Evidence of fees dating back to 2013.	
Notes:	*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.			
<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.	Compliant	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.	
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.	Compliant	Blasting schedule for the site. Evidence provided of notification of blasts. Evidence on the website of blast scheduling for each upcoming week. With this noting the proposed time of the blast and whether there is a road closure. It is noted that the Blast Scheduling pdfs are located within the 'Management Plans and Reporting' section of the website, which is not an obvious location. See recommendation. Also evidence of notification via the Muswellbrook Shire Council website.  Evidence sighted of greater than 24 hours notice for closing roads.  <a href="https://www.muswellbrook.nsw.gov.au/index.php/blasting/blasting-announcements">https://www.muswellbrook.nsw.gov.au/index.php/blasting/blasting-announcements</a>	
<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.	Compliant	The transport summary is shown on the website. It shows the features of condition a. <a href="https://machenergyaustralia.com.au/wp-content/uploads/Coal-Transport-Records.pdf">https://machenergyaustralia.com.au/wp-content/uploads/Coal-Transport-Records.pdf</a>	
<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.	Not Triggered	This has been commenced but that condition has not been triggered yet.	
44B	The Applicant must implement the recommendations of the Geotechnical Investigation Report to the satisfaction of the Secretary.	Not Triggered	This has been commenced but that condition has not been triggered yet.	
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.	Not Triggered	This has been commenced but that condition has not been triggered yet.	
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 OEH; (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.	Not Triggered	Final design has not yet been finalised.	

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Condition Number	Condition	Compliance Status	Evidence	Recommended Action																						
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.	Not Triggered	No construction for MOD 4.																							
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.	Not Triggered	No construction for MOD 4.																							
Note:	The Mining Lease Boundary is shown in Figure 2 of Appendix 2.																									
44G	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: (a) be prepared in consultation with the EPA and any residents who may be affected by the noise generated by these works; (b) address the relevant requirements of the Interim Construction Noise Guideline (DECC, 2009); and (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.	Not Triggered	No construction for MOD 4.																							
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).	Note																								
44H	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.																									
	<table border="1"> <caption>Table 10A: Construction noise criteria</caption> <thead> <tr> <th>Receiver or other location</th> <th>Standard Construction Hours dB(A) L<sub>day(15min)</sub></th> </tr> </thead> <tbody> <tr><td>67, 215, 216, 218, 219</td><td>47</td></tr> <tr><td>206, 217, 220, 221, 225, 532, 533</td><td>48</td></tr> <tr><td>222, 223, 531</td><td>49</td></tr> <tr><td>224, 530</td><td>50</td></tr> <tr><td>19, 20, 21, 207, 289</td><td>51</td></tr> <tr><td>527, 528</td><td>56</td></tr> <tr><td>529</td><td>54</td></tr> <tr><td>68</td><td>57</td></tr> <tr><td>23</td><td>69</td></tr> <tr><td>All other privately-owned land</td><td>5 dB(A) above the daytime operational L<sub>day(15min)</sub> noise criteria in Table 3</td></tr> </tbody> </table>	Receiver or other location	Standard Construction Hours dB(A) L <sub>day(15min)</sub>	67, 215, 216, 218, 219	47	206, 217, 220, 221, 225, 532, 533	48	222, 223, 531	49	224, 530	50	19, 20, 21, 207, 289	51	527, 528	56	529	54	68	57	23	69	All other privately-owned land	5 dB(A) above the daytime operational L <sub>day(15min)</sub> noise criteria in Table 3	Not Triggered	No construction for MOD 4.	
Receiver or other location	Standard Construction Hours dB(A) L <sub>day(15min)</sub>																									
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All other privately-owned land	5 dB(A) above the daytime operational L <sub>day(15min)</sub> noise criteria in Table 3																									
Notes:	<p>*To identify the locations referred to in Table 10A, see the figures in Appendix 5.</p> <p>*The Mining Lease Boundary is shown in Figure 2 of Appendix 2.</p> <p>*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.</p> <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>																									
44I	The Applicant must prepare a Construction Environmental Management Plan for MOD 4 construction works, to the satisfaction of the Secretary. This plan must: (a) be prepared in consultation with the EPA, Council and any relevant road or utilities authorities; (b) describe measures to be implemented to minimise construction-related noise, vibration, dust, biodiversity and visual impacts, including specific measures to minimise: - surface disturbance; and - the cumulative impacts of construction and operational noise; (c) describe detailed procedures to be implemented to: - notify affected landowners of upcoming construction activities; - receive, record, handle and respond to construction-related complaints; and - resolve any disputes that may arise during MOD 4 construction works; (d) include a Construction Traffic Management Plan which: - 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 - 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 (e) include a Historic Heritage Management Plan which describes measures to implement the relevant historic heritage management commitments outlined in Appendix 3; and (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: - procedures for testing, removal and disposal of potentially contaminated material; and - measures to ensure compliance with the requirements of SafeWork NSW and relevant guidelines. 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.	Compliant	<p><u>Preparation:</u> CEMP submitted to Colin Phillips at DPIE on 20 November 2019. MOD4 CEMP has been approved by DPIE, and is available on the MACH Energy website. Submission of Mount Pleasant Operation (MPO) Construction Environmental Management Plan (CEMP) for review_approval.msg.</p> <p>MACH Energy sent a copy of the CEMP back to DPIE on 21 February 2020.</p> <p>a) Evidence of consultation in Section 1.3; b) Section 5; c) Section 9; d) Section 5.5 and Appendix A; e) Section 5.6 and Appendix B; f) Section 5.7 and Appendix C.</p> <p><u>Implementation:</u> Approved on 10 March 2020. Only work related to the MOD 4 area has been archaeological clearing.</p> <p>Management Plan not yet implemented. Ground disturbance permit is an appendix.</p>																							
<b>VISUAL</b>																										
<b>Visual Amenity and Lighting</b>																										
45	The Applicant must: (a) implement all reasonable and feasible measures to minimise the visual and off-site lighting impacts of the development; (b) ensure no outdoor lights shine above the horizontal; and (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.	Compliant	<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 completed checklist dated 13/11/2019.</p> <p>Lighting areas were not reviewed as part of the audit as there was no access to the top dump for light vehicles.</p> <p>There have been some visual/lighting complaints with these noted in the Annual Review and complaints log.</p>																							
<b>Additional Visual Mitigation Measures</b>																										
46	46. 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.  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.	Compliant	Based on site communications there has been no formal request.																							

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Condition Number	Condition	Compliance Status	Evidence	Recommended Action										
Notes:	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													
<b>Visual Impact Management Plan</b>														
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>	Compliant	<p><u>Preparation:</u></p> <p>a) Current Visual Impact Management Plan approved by DPIE 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><u>Implementation:</u></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 completed checklist dated 13/11/2019.</p> <p>Lighting plants were not reviewed as part of the audit.</p> <p>From discussions with site personnel and from the site inspection it was noted that the site is quite visible from Muswellbrook and surrounds. There are complaints relating to visual impacts with evidence provided to SLR illustrating the response by MACH Energy.</p>	REC: 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.										
<b>BUSHFIRE MANAGEMENT</b>														
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>	Compliant	<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 was provided.</p>											
<b>WASTE</b>														
<b>Waste Minimisation and Disposal</b>														
49	<p>The Applicant must:</p> <p>(a) minimise the waste (including coal reject) generated by the development;</p> <p>(b) ensure that the waste generated by the development is appropriately stored, handled and disposed of in a lawful manner.</p>	Non-Compliant (Low Risk)	<p>a) Based on the evidence provided the site has minimised the amount of waste being generated.</p> <p>b) Non - compliance for implementation for waste storage however this was classified as a low risk. See Schedule 3 Condition 52.</p>											
<b>On-site Sewage</b>														
50	The Applicant must ensure that all sewage generated on site is treated and disposed of to the satisfaction of Council.	Compliant	<p>Evidence of sewage treatment plant inspections. Dated 24.07.2019.</p> <p>Two facilities on site. Based on site communications there have been no issues.</p>											
<b>Disposal of Fine Rejects</b>														
51	The Applicant must not emplace fine rejects in the southern catchment without the written approval of the Secretary	Not Triggered	Based on site communications this has not been triggered. No evidence from inspection.											
<b>Waste Management Plan</b>														
52	<p>The Applicant must prepare a Waste Management Plan for the development to the satisfaction of the Secretary. This plan must:</p> <p>(a) be prepared in consultation with Dol Water and DRG, and submitted to the Secretary for approval prior to carrying any development on site;</p> <p>(b) describe the measures that would be implemented to avoid, minimise, reuse and recycle all waste streams generated by the development;</p> <p>(c) include a fines emplacement plan; and</p> <p>(d) a program to evaluate the fines emplacement plan and methods, with a view to emplacing fines within active mining areas.</p> <p>The Applicant must implement the management plan as approved by the Secretary.</p>	Non-Compliant (Low Risk)	<p><u>Preparation:</u></p> <p>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.</p> <p>b) Section 5.</p> <p>c) Appendix 1.</p> <p>d) Section 7.2. See Section.</p> <p><u>Implementation:</u> Non - compliant for hydrocarbon and chemical storage.</p> <p><u>In-pit storage area:</u></p> <p>a) The general waste bins contained oily rags and cardboard. In one bin the rags were soaked with hydrocarbon material and should have been placed in a separated oily rag bin.</p> <p>b) Oily rags were not stored in the oily rag bin. Instead, they were in bags on a pallet, with one bag open and oily rags spilling out on the ground.</p> <p>c) Small hydrocarbon spill identified.</p> <p>d) There were five 44 gallon drums (some full, some mostly empty) with oil. There were three bulky bins (some half full, some mostly empty)</p> <p><u>Workshop area:</u></p> <p>a) One unlabelled general waste bin. Other labelling was adequate.</p> <p>b) Small oil drip from an engine prepared for transport in the storage area. A drip tray was previously under the area but was removed due to heavy rain.</p> <p>c) There were six bulky bins of gear oil (85W-140) which were not banded. Based on site discussions they had been unloaded but were not yet stored in banded shipping containers. There were also approximately 20 mostly empty bulky bin containers not stored in bunds. There was seven 44 gallon drums (appeared full) with oil.</p> <p><u>Construction offices:</u></p> <p>a) Cardboard was in the general waste bin.</p> <p>b) Unbanded containers, oil drum and battery.</p> <p>c) Bagged contaminated soil from a diesel spill was in the storage area. Most of this material was from the spill kit.</p>	<p><u>In - pit Storage</u></p> <p>a) &amp; b) Ensure all waste is separated out and stored in the correct waste or recycle bin.</p> <p>c) Ensure all hydrocarbon spills are cleaned up.</p> <p>d) All hydrocarbons and chemicals should be stored in banded areas. Used drums and containers are still to be stored in a banded area until they are taken off site.</p> <p><u>Workshop Area</u></p> <p>a) Ensure Remondis label all waste bins.</p> <p>b) Place oil pan under any engines/equipment stored in unbanded areas, that have the potential to drip any hydrocarbons/fluid etc.</p> <p>c) Ensure all chemicals/hydrocarbons are banded. This includes both full and empty oil drums/containers. Old hydrocarbon containers should be removed from site as soon as practical.</p> <p><u>Construction Offices</u></p> <p>a) Ensure all waste is separated out and stored in the correct waste or recycle bin.</p> <p>b) Ensure all chemicals/hydrocarbons are banded.</p> <p>c) Ensure all contaminated material is transported to the bioremediation area or disposed of offsite by a suitable qualified contractor.</p>										
<b>REHABILITATION</b>														
<b>Rehabilitation Objectives</b>														
	<p>The Applicant must rehabilitate the site to the satisfaction of DRG. 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.</p> <table border="1"> <thead> <tr> <th>Table 11: Rehabilitation Objectives</th> <th>Objective</th> </tr> </thead> <tbody> <tr> <td><u>Feature</u></td> <td></td> </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 uses</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 habitat, within any diverted and/or re-established creek lines and related 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> </ul> </td> </tr> </tbody> </table>	Table 11: Rehabilitation Objectives	Objective	<u>Feature</u>		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 uses</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 habitat, within any diverted and/or re-established creek lines and related 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> </ul>			
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Condition Number	Condition	Compliance Status	Evidence	Recommended Action
53	<ul style="list-style-type: none"> <li>Other land affected by the development: <ul style="list-style-type: none"> <li>Achieve the nominated land capability classification</li> <li>Restore ecosystem function, including maintaining or establishing self-sustaining ecosystems comprised of local native plant species (unless DRG agrees otherwise)</li> </ul> </li> <li>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> </li> <li>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 wall instability risk; and</li> <li>the risk of flood interaction</li> </ul> </li> </ul> </li> <li>Surface infrastructure of the development: <ul style="list-style-type: none"> <li>To be decommissioned and removed, unless DRG agrees otherwise</li> </ul> </li> <li>Rehabilitation materials: <ul style="list-style-type: none"> <li>Materials from areas disturbed under this consent (including topsoils, substrates and seeds) are to be recovered, managed and used as rehabilitation resources, to the greatest extent practicable</li> </ul> </li> <li>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> </li> <li>Community: <ul style="list-style-type: none"> <li>Ensure public safety</li> <li>Minimise adverse socio-economic effects associated with mine closure</li> </ul> </li> </ul>	Not Triggered	This has not yet been triggered. Section 5.1 of the IEA Main document outlines the rehabilitation status and also some recommendations.	
54	<p>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:</p> <p>(a) be prepared by a suitably qualified and experienced person/s whose appointment has been endorsed by the Secretary;</p> <p>(b) be prepared in consultation with DRG and Council;</p> <p>(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;</p> <p>(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; and</p> <p>(e) include an indicative schedule for the staged rehabilitation of the development.</p> <p>The Applicant must implement the approved strategy as approved from time to time by the Secretary.</p>	Observation	<p>Preparation:</p> <p>a) This Rehabilitation Strategy has been prepared on behalf of MACH Energy by Dr David Freudenberger (whose appointment has been approved by DPE [letter dated 18 September 2018] as a 'suitably qualified and experienced person'), to satisfy the requirements under Condition 54, Schedule 3 of Development Consent DA 92/97. DPE approved the most recent version of 16 May 2019.</p> <p>Evidence of email submission by 29 January 2019.</p> <p>b) It appears consultation was completed but there is minimal information about who, when and outcomes.</p> <p>c) Rehabilitation objectives outlined See Section 3;</p> <p>d) There is a seed list separated by different stratus. See Table 4;</p> <p>e) There is some generic information about staged rehabilitation (Section 4.3). Further information in the Rehabilitation Management Plan.</p> <p>When reviewing the Rehabilitation Strategy and MOP/RMP it was determined there were some inconsistencies with figures/plans:</p> <ul style="list-style-type: none"> <li>+Figure 3 (Provisional Post-mining Land Use Domains) and Figure 4 (Conceptual Final Landform) of the Rehabilitation Strategy have differences in final landuse.</li> <li>+Figure 3 in the Rehabilitation Strategy has much of the area shown as Domain C - Agricultural Land, whereas Figure 4 in the Rehabilitation Strategy has much of the area being shown as both agricultural land and open woodland.</li> <li>+Figure 3 in the Rehabilitation Strategy has a large area as Domain B - Water Infrastructure and Storage, whereas Figure 4 in the Rehabilitation Strategy has this area being rehabilitated woodland.</li> <li>Note Plan 4 of the MOP has this area marked as Domain B - Water Infrastructure and Storage.</li> <li>+Figure 3 in the Rehabilitation Strategy has a smaller area of riparian rehabilitation (along established drainage lines compared to Figure 4 in the Rehabilitation Strategy which has riparian vegetation).</li> <li>+Domain A - Final Void appears to be smaller in the MOP/RMP compared to Figure 3 and 4 of the Rehabilitation Strategy.</li> </ul> <p>Implementation:</p> <p>See Section 5.1 of the main report for further details.</p> <p>Evidence of some rehabilitation areas with rill erosion and some gully erosion. This has been noted and will be reshaped by Thiess in the near future. Designs are being finalised. Evidence of areas that have been recently shaped and rehabilitated using the geofuv system. These looked to be well shaped landforms and ripped well on the horizontal to reduce erosion potential. Initial cover crop is coming through and most of the area has held up well in the recent rainfall.</p> <p>The area below the tailings dam is boggy and showing signs of erosion.</p>	<p>REC: 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>Some seeding should be completed in the area above ED2 which is showing signs of erosion.</p> <p>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>Update the relevant document (MOP/RMP or Rehabilitation Strategy) to ensure there are no inconsistencies with the documents.</p>
<b>Progressive Rehabilitation</b>				
55	<p>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.</p> <p>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.</p>	Compliant	Evidence of some progressive rehabilitation. However the site is still in its infancy therefore minimal has been completed. The mine plan is designed to minimise disturbance areas.	As per rehabilitation and erosion and sediment control recommendations.
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.	Compliant	This area was viewed in the field. It should be noted that it is likely that much of the rail loop and infrastructure corridor will be removed in the next 2 years.	
Notes:	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).			
<b>Rehabilitation Management Plan</b>				
56	<p>By the end of April 2019, unless otherwise agreed by the Secretary, the Applicant must prepare a Rehabilitation Management Plan for the development to the satisfaction of DRG. This plan must:</p> <p>(a) be prepared by a suitably qualified and experienced person/s whose appointment has been endorsed by the Secretary;</p> <p>(b) be prepared in consultation with the Department, DoI Water, OEHL, DPI, and Council;</p> <p>(c) be prepared in accordance with any relevant DRG Guideline;</p> <p>(d) describe how the rehabilitation of the site would achieve the objectives identified in Table 11 and the outcomes described in the Rehabilitation Strategy referred to in condition 54;</p> <p>(e) include a detailed plan for the reinstatement and review of the proposed:</p> <ul style="list-style-type: none"> <li>- agricultural land capability of grassland areas in the final landform, including a protocol for periodic trials to demonstrate that the land capability is being achieved; and</li> <li>- rehabilitated woodland areas and fauna habitat, including a protocol for periodic trials to demonstrate that the target vegetation community is being achieved;</li> </ul> <p>(f) include detailed performance and completion criteria for evaluating the performance of the rehabilitation of the site, and for triggering remedial action (if necessary);</p> <p>(g) describe the measures to be implemented to ensure compliance with the relevant conditions of this consent, and address all aspects of rehabilitation including mine closure, final landform (including final voids), final land use/s and water management in the final landform;</p> <p>(h) include procedures for the use of interim stabilisation and temporary vegetation strategies, where reasonable to minimise the area exposed for dust generation;</p> <p>(i) include a program to monitor, independently audit and report on the effectiveness of the measures in condition 56(g), and progress against the detailed performance and completion criteria in condition 56(f);</p> <p>(j) to the maximum extent practicable build on and integrate with the other management plans required under this consent; and</p> <p>(k) include detailed scheduling for progressive rehabilitation to be initiated, undertaken and/or completed over the next three years.</p>	Observation	<p>Preparation:</p> <p>Evidence of three MOPs during the Audit period. Each MOP covered a one year period.</p> <p>Approval letter from the RR is dated 28 June 2019. Approval letter states the MOP/RMP was submitted to the RR on 4 June 2019. This is after the date of end of April outlined in the consent condition. However evidence provided of consultation with the RR during this period.</p> <p>a) and b)</p> <p>Section 1.3 of the MOP/RMP states:</p> <p>As required by Condition 56, Schedule 3 of Development Consent DA 92/97, a draft version of this MOP/RMP was submitted to the DPE, Department of Industry - Water (DoI Water), Office of Environment and Heritage (OEHL), Department of Primary Industries (DPI) and the Muswellbrook Shire Council (MSC) for the purpose of consultation. No dates provided.</p> <p>The MOP/RMP was prepared on behalf of MACH Energy by Dr David Freudenberger (whose appointment has been approved by the DPE [letter dated 18/09/18] as a 'suitably qualified and experienced person'), to satisfy the requirements under Condition 56, Schedule 3 of Development Consent DA 92/97.</p> <p>c) MOP Guideline was used for the project;</p> <p>d) Covered in several sections;</p> <p>e) Sections 6-8;</p> <p>f) Section 6;</p> <p>g) Void management covered in several sections;</p> <p>h) Section 2.11;</p> <p>i) Sections 8, 11 and 12;</p> <p>j) Section 3 and 7.2.1;</p> <p>k) Section 7.2 and MOP Plans.</p> <p>Note, See Schedule 3 Condition 54 which outlines the difference in figures between the MOP and Rehabilitation Strategy. SLR has not labelled this condition compliant as we are not aware of which figures (Rehabilitation Strategy or MOP/RMP are correct.</p>	

## Development Consent (DA 92/97)

Condition Number	Condition	Compliance Status	Evidence	Recommended Action
	The Applicant must implement the management plan as approved by DRG.		<p><b>Implementation:</b> See Section 5.1 of the main report for further details.</p> <p>Evidence of some rehabilitation areas with rill erosion and some gully erosion. This has been noted and will be reshaped by Thiess in the near future. Designs are being finalised. Evidence of areas that have been recently shaped and rehabilitated using a geomorphology design system. These looked to be well shaped landforms and ripped well on the horizontal to reduce erosion potential. Initial cover crop is coming through and most of the area has held up well in the recent rainfall.</p> <p>The area below the fines emplacement area is a natural spring according to discussions with MACH Energy. Area is reviewed as part of inspections. There are some signs of erosion in the area.</p>	
<b>SCHEDULE 4 ADDITIONAL PROCEDURES</b>				
<b>Notification of Landowners</b>				
1	<p>By the end of December 2011, the Applicant must:</p> <ul style="list-style-type: none"> <li>(a) notify in writing the owners of: <ul style="list-style-type: none"> <li>-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;</li> <li>-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;</li> <li>-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;</li> <li>-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</li> </ul> </li> <li>(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.</li> </ul> <p>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).</p>	Not Triggered	Historical condition. Well outside this audit period.	
1A	<p>Prior to entering into any tenancy agreement for any land owned by the Applicant that is predicted to experience exceedances of the recommended dust and/or noise criteria, the Applicant must:</p> <ul style="list-style-type: none"> <li>(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</li> <li>(b) advise the prospective tenants of the rights they would have under this consent, to the satisfaction of the Secretary.</li> </ul>	Compliant	Section in the residential agreement for the 'right to mine'. Acknowledgement of potential mining impacts.	
2	<p>As soon as practicable after obtaining monitoring results showing:</p> <ul style="list-style-type: none"> <li>(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</li> <li>(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).</li> </ul>	Compliant	Section in the residential agreement for the 'right to mine'. Acknowledgement of potential mining impacts.	
<b>Independent Review</b>				
3	<p>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.</p> <p>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.</p> <p>If the Secretary is satisfied that an independent review is warranted, then within 2 months of the Secretary's decision, the Applicant must:</p> <ul style="list-style-type: none"> <li>(a) commission a suitably qualified, experienced and independent expert, whose appointment has been approved by the Secretary, to: <ul style="list-style-type: none"> <li>-consult with the landowner to determine his/her concerns;</li> <li>-conduct monitoring to determine whether the development is complying with the relevant criteria; and</li> <li>-if the development is not complying with these criteria then: <ul style="list-style-type: none"> <li>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;</li> <li>o identify the measures that could be implemented to ensure compliance with the relevant criteria; and</li> </ul> </li> </ul> </li> <li>(b) give the Secretary and landowner a copy of the independent review.</li> </ul>	Compliant	<p>An independent review on air quality has been triggered, and MACH Energy is working with the DPIE in this regards. Investigations are ongoing.</p> <p>Based on consultation with DPIE this is only for air quality.</p> <p>Independent specialists have been engaged.</p>	
<b>Land Acquisition</b>				
6	<p>Within 3 months of receiving a written request from a landowner with acquisition rights, the Applicant must make a binding written offer to the landowner based on:</p> <ul style="list-style-type: none"> <li>(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: <ul style="list-style-type: none"> <li>-existing and permissible use of the land, in accordance with the applicable planning instruments at the date of the written request; and</li> <li>-presence of improvements on the land and/or any approved building or structure which has been physically commenced at the date of the landowner's written request, and is due to be completed subsequent to that date, but excluding any improvements that have resulted from the implementation of the additional mitigation measures required under condition 2 of Schedule 3;</li> </ul> </li> <li>(b) the reasonable costs associated with: <ul style="list-style-type: none"> <li>-relocating within the Muswellbrook, Singleton or Scone local government area, or to any other local government area determined by the Secretary; and</li> <li>-obtaining legal advice and expert advice for determining the acquisition price of the land, and the terms upon which it is to be acquired; and</li> <li>(c) reasonable compensation for any disturbance caused by the land acquisition process.</li> </ul> </li> </ul> <p>However, if at the end of this period, the Applicant and landowner cannot agree on the acquisition price of the land and/or the terms upon which the land is to be acquired, then either party may refer the matter to the Secretary for resolution.</p> <p>Upon receiving such a request, the Secretary shall request the President of the NSW Division of the Australian Property Institute to appoint a qualified independent valuer to:</p> <ul style="list-style-type: none"> <li>-consider submissions from both parties;</li> <li>-determine a fair and reasonable acquisition price for the land and/or the terms upon which the land is to be acquired, having regard to the matters referred to in paragraphs (a)-(c) above;</li> <li>-prepare a detailed report setting out the reasons for any determination; and</li> <li>-provide a copy of the report to both parties.</li> </ul> <p>Within 14 days of receiving the independent valuer's report, the 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.</p>	Compliant	<p>There was only one property where this occurred. For other properties the site has completed the 'without prejudice discussions' which do not trigger this condition.</p> <p>For this property the procedure appeared to have followed the process of a)-c).</p>	
	<p>However, if either party disputes the independent valuer's determination, then within 14 days of receiving the independent valuer's report, they may refer the matter to the Secretary for review. Any request for a review must be accompanied by a detailed report setting out the reasons why the party disputes the independent valuer's determination. Following consultation with the independent valuer and both parties, the Secretary will determine a fair and reasonable acquisition price for the land, having regard to the matters referred to in paragraphs (a)-(c) above, the independent valuer's report, the detailed report of the party that disputes the independent valuer's determination and any other relevant submissions.</p> <p>Within 14 days of this determination, the Applicant must make a binding written offer to the landowner to purchase the land at a price not less than the Secretary's determination.</p> <p>If the landowner refuses to accept the 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.</p>			
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.	Compliant	Evidence provided of the entire process including the purchase.	
<b>SCHEDULE 5 ENVIRONMENTAL MANAGEMENT, REPORTING AND AUDITING</b>				
<b>ENVIRONMENTAL MANAGEMENT</b>				

## Development Consent (DA 92/97)

Condition Number	Condition	Compliance Status	Evidence	Recommended Action
<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>	Compliant	<p><b>Preparation:</b></p> <ul style="list-style-type: none"> <li>a) Date prior to this audit. DPIE have approved the most recent EMS on 14.01.2019.</li> <li>b) Covered in general document layout. Section 3 and 4;</li> <li>c) Section 4;</li> <li>d) Section 5.1;</li> <li>e) Procedures in Section 5 and 6;</li> <li>f) EMP's attached separately. Figure 4 outlines monitoring locations</li> </ul> <p><b>Implementation:</b></p> <ul style="list-style-type: none"> <li>• Evidence of complaints log on website;</li> <li>• Evidence of incident management system and reporting. Incident reporting for blast over 120dBA which turned out to be not a compliance issue.</li> <li>• Evidence of environmental compliance database which tracks consent conditions.</li> </ul>	
<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>	Compliant	The 2017 -2019 Annual Reviews outline dust. There were no annual exceedances in dust in the 2018 Annual Review documents that weren't covered by extraordinary events or evidence of justification by MACH Energy/air quality specialist. There are numerous recommendations about dust covered previously.	
<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> <li>(h) a protocol for periodic review of the plan</li> </ul> </li> </ul> <p><i>Notes:</i> The Secretary may waive some of these requirements if they are unnecessary or unwarranted for particular management plans.</p>	Compliant	<p><b>Preparation:</b></p> <p>Management Plans for the sites have been prepared to meet the 'All Management Plan' requirements. These are covered in various sections of the management plans.</p> <p><b>Implementation:</b></p> <p>Covered under specific management plans.</p>	<p>REC: 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>
<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>	Compliant	<p>Evidence of 2017, 2018 and 2019 Annual Reviews.</p> <ul style="list-style-type: none"> <li>a) Covered in Section 3-8;</li> <li>b) Covered in Section 5 and 6;</li> <li>c) Section 1 and 10;</li> <li>d) Section 5-7. The trend analysis has improved over the past three Annual Reviews. There has been a recommendation regarding some more specialist input, with trends to likely be discussed further during that report;</li> <li>e) Section 5-7;</li> <li>f) Section 11;</li> </ul>	<p>As per Schedule 3 Condition 5 recommendation.</p> <p>REC: 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; and</li> <li>- compliance against cumulative criteria.</li> </ul> <p>As per Schedule 3 Condition 22 and 23 recommendation.</p> <p>REC: 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>
<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.</p> <p>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>	Compliant	<p>MOD 3 - Approved 24 August 2018.</p> <p>MOD 4 - Approved 16 November 2018.</p> <p>MACH Energy continues to review Mount Pleasant Operation Environmental Management Plans periodically in accordance with Schedule 5, Condition 4 of Development Consent DA 92/97.</p> <p>However, often when an Environmental Management Plan is reviewed the outcome is that no changes to the Plan are required.</p> <p>While the Annual Review &amp; Annual Rehabilitation Report may include a note as to Environmental Management Plans that are intended to be updated in the next Annual Review period, Schedule 5, Condition 4 allows up to 3 months following submission of the Annual Review to review all Environmental Management Plans, including in response to regulatory comments that may be received on the Annual Review itself. Therefore SLR is satisfied that reviews are at least being completed annually.</p> <p>Communications regarding the review and update of the EMPs were undertaken with the Department, including advising the outcomes of EMP reviews. It is also noted that the time between the submission of revised management plans for DPIE review, and their ultimate approval is dependent on DPIE administrative priorities at the time, and any supplementary queries that the DPIE may raise.</p>	<p>REC: Update wording in the Annual Review to outline which management plans require updating and which management plans do not require updating.</p>
<p><i>Notes:</i> 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.</p> <p>In the event of an inconsistency between condition 4(d) above and any condition in Schedule 3 of this consent, the latter prevails.</p>				
<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>	Compliant	Noted. The management plans have been regularly updated during the life of the operations.	
	<p><i>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.</i></p> <p><i>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.</i></p>	Note	Noted	
<b>Notes:</b>				
<b>Management of Cumulative Impacts</b>				

Development Consent (DA 92/97)				
Condition Number	Condition	Compliance Status	Evidence	Recommended Action
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. 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.	Compliant	Evidence of cumulative management through meetings with Bengalla and Mt Arthur. Quarterly cumulative meetings. General manager meetings occur quarterly. Key monitoring programs include cumulative monitoring and management. There is some data sharing when required. There are some air quality monitors located on Bengalla land and also Bengalla monitors on MACH Energy land. However these are not common monitoring locations. Evidence of sharing of meteorological monitoring system. For a blast investigation MACH Energy used data from the racecourse road monitor (owned by Bengalla).	
<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. Note: The CCC is an advisory committee. The Department and other relevant agencies are responsible for ensuring that the Applicant complies with this consent.	Compliant	Evidence of CCC minutes on the website. CCC appears to have met the DPIE requirements.	
<b>Incident Notification</b>				
7	The Applicant must immediately notify the Department and any other relevant agencies immediately after it becomes aware of an incident. The notification must be in writing to compliance@planning.nsw.gov.au and identify the development (including the development application number and name) and set out the location and nature of the incident.	Compliant	No reportable incidents defined as an 'incident' under the Development Consent condition. None reported in Annual Reviews.	
<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 to compliance@planning.nsw.gov.au 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, the way in which 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.	Compliant	Evidence of email from 2019 to DPIE stating the site may be non compliant with the PM10 2019 annual average. Potential blast exceedance notified within seven days. Following a study and detailed consultation with the DPIE concluded in a letter dated 7 February 2020 that 'the Department has determined that the blast did not cause exceedances of blasting criteria at any residence on privately owned land and therefore MACH Energy did not breach Schedule 3 Condition 10 of the Consent'. Based on site discussions and review of data there has been no non-compliances relating to criteria of this consent.	
Notes:	A non-compliance which has been notified as an incident does not need to also be notified as a non-compliance.			
<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.	Note	Noted	
Notes:	For the purposes of this condition, as set out in the EP&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.			
<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.	Compliant	Monthly reporting is provided on the website. Also Annual Reviews are provided.	
<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 trending 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.	Compliant	<u>Previous IEA:</u> a) Previous site component of the audit was completed in December 2017. According to the previous audit report the audit period was from 1 January 2014 to the 25 November 2017. The timing was delayed due to the original construction timing. A letter was provided to Mount Pleasant on 6 January 2014 by DPIE outlining the delay in the first audit. b) Evidence of consultation in Section 2.2; c) Assessed throughout; d) Assessed throughout; e) Section 3 and 4; and f) The audit report was first submitted to DPIE on 27 February 2018. Evidence of resubmission on 18 May 2018. Status of actions from the previous Audit are provided in the Annual Review. These are tracked. <u>This IEA:</u> SLR believe we have completed the audit to meet a-f requirements. This audit covers 25 November 2017 to 27 February 2020.	
Notes:	This audit team must be led by a suitably qualified auditor and include experts in any fields specified by the Secretary.			
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.	Compliant	The previous audit site inspection was on 5 December 2017, with the audit report first submitted to DPIE on 27 February 2018.	
<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.	Compliant	Based on a review on 5 March 2020, all this information is available on the website.	

# EPL 20850

Condition Number	Condition	Compliance Status	Evidence	Recommended Action																
<b>1. Administrative Conditions</b>																				
<b>A1 What the licence authorises and regulates</b>																				
A1.1	This licence authorises the carrying out of the scheduled activities listed below at the premises specified in A2. The activities are listed according to their scheduled activity classification, fee-based activity classification and the scale of the operation.  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.	Note																		
	<table border="1"> <thead> <tr> <th>Scheduled Activity</th> <th>Fee Based Activity</th> <th>Scale</th> </tr> </thead> <tbody> <tr> <td>Coal works</td> <td>Coal works</td> <td>&gt; 5000000 T annual handling capacity</td> </tr> <tr> <td>Mining for coal</td> <td>Mining for coal</td> <td>&gt; 5000000 T annual production capacity</td> </tr> </tbody> </table>	Scheduled Activity	Fee Based Activity	Scale	Coal works	Coal works	> 5000000 T annual handling capacity	Mining for coal	Mining for coal	> 5000000 T annual production capacity		Site inspection and 2017/2018 and 2018/2019 Annual Returns indicate that these activities were undertaken at the site.								
Scheduled Activity	Fee Based Activity	Scale																		
Coal works	Coal works	> 5000000 T annual handling capacity																		
Mining for coal	Mining for coal	> 5000000 T annual production capacity																		
A2	Premises or plant to which this licence applies																			
A2.1	The licence applies to the following premises:																			
	<table border="1"> <thead> <tr> <th>Premises Details</th> </tr> </thead> <tbody> <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>AREA IDENTIFIED AS 'MACH ENERGY AUSTRALIA, MT PLEASANT PROJECT, ENVIRONMENT PROTECTION LICENCE PREMISES MAP' DATED 08/02/2018 AND SHAPE FILES, AS CONTAINED IN EPA REFERENCE DOC18/74684. THIS LICENCE DOES NOT APPLY TO, OR INCLUDE, PUBLIC ROADS.</td> </tr> </tbody> </table>	Premises Details	MOUNT PLEASANT OPERATION	1100 WYBONG ROAD	MUSWELLBROOK	NSW 2333	AREA IDENTIFIED AS 'MACH ENERGY AUSTRALIA, MT PLEASANT PROJECT, ENVIRONMENT PROTECTION LICENCE PREMISES MAP' DATED 08/02/2018 AND SHAPE FILES, AS CONTAINED IN EPA REFERENCE DOC18/74684. THIS LICENCE DOES NOT APPLY TO, OR INCLUDE, PUBLIC ROADS.	Note												
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A3	Other activities																			
A3.1	This licence applies to all other activities carried on at the premises, including:																			
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Ancillary Activity																				
Coal Works																				
Land-based extractive activity																				
sewage treatment plant																				
A4	Information supplied to the EPA																			
A4.1	Works and activities must be carried out in accordance with the proposal contained in the licence application, except as expressly provided by a condition of this licence.  In this condition the reference to "the licence application" includes a reference to: a) the applications for any licences (including former pollution control approvals) which this licence replaces under the Protection of the Environment Operations (Savings and Transitional) Regulation 1998; and b) the licence information form provided by the licensee to the EPA to assist the EPA in connection with the issuing of this licence.	Note	No reason to determine non-compliance.																	
<b>2. Discharges to Air and Water and Applications to Land</b>																				
<b>P1 Location of monitoring/discharge points and areas</b>																				
P1.1	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.																			
	<table border="1"> <thead> <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> </thead> <tbody> <tr> <td>1</td> <td>Particulate Monitoring (PM10 network)</td> <td></td> <td>Air Quality - TEOM Particulate Monitor located in the South-Eastern of the premises and labelled 'A-PF2' on plan titled MACHEnergy - Environment Project Licence Premises Map, dated 08/02/2018 (EPA reference DOC18/74684), Easting 299575, Northing 8428744</td> </tr> <tr> <td>2</td> <td>Particulate Monitoring (PM10 network)</td> <td></td> <td>Air Quality - TEOM Particulate Monitor located in the North-Northwest corner of the premises and labelled 'A-PF5' on plan titled MACHEnergy Mount Pleasant Operations - Environmental Monitoring Sites, provided to the EPA on 8 November 2018 (DOC18/588131)</td> </tr> </tbody> </table>	Air				EPA identification no.	Type of Monitoring Point	Type of Discharge Point	Location Description	1	Particulate Monitoring (PM10 network)		Air Quality - TEOM Particulate Monitor located in the South-Eastern of the premises and labelled 'A-PF2' on plan titled MACHEnergy - Environment Project Licence Premises Map, dated 08/02/2018 (EPA reference DOC18/74684), Easting 299575, Northing 8428744	2	Particulate Monitoring (PM10 network)		Air Quality - TEOM Particulate Monitor located in the North-Northwest corner of the premises and labelled 'A-PF5' on plan titled MACHEnergy Mount Pleasant Operations - Environmental Monitoring Sites, provided to the EPA on 8 November 2018 (DOC18/588131)	Compliant	* Air quality monitoring sites (A-PF22 and A-PF5) are included on Figure 2 of the Air Quality Management Plan (AQMP). Evidence of monitoring results.	
Air																				
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P1.2	The following utilisation areas referred to in the table below are identified in this licence for the purposes of the monitoring and/or the setting of limits for any application of solids or liquids to the utilisation area.	Note	Noted																	
P1.3	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.																			



# EPL 20850

Condition Number	Condition	Compliance Status	Evidence	Recommended Action																														
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<b>3.Limit Conditions</b>																																		
L1	Pollution of waters																																	
L1.1	Except as may be expressly provided in any other condition of this licence, the licensee must comply with section 120 of the Protection of the Environment Operations Act 1997.	Compliant	<p>According to the 2018 Annual Review: <i>Filling of Environmental Dam 3 caused seepage of clean water to neighbouring Bengalla Coal Mine. In May 2018, MPO were advised that seepage had been noted at Bengalla Coal Mine. MACH Energy and Bengalla Coal Mine are jointly undertaking engineering and hydrogeological reviews to determine the source of the seepage. No pollution or environmental harm.</i></p> <p>There was a detailed investigation and mitigation measures implemented. SLR has been provided no evidence of a prosecution or PIN regarding the issue. MACH Energy liaised with DPIE as part of this audit and DPIE responded to MACH Energy on 25 March 2020 stating 'there is no further action is required in regards to this matter from the development consent perspective'.</p>																															
L2	Noise Limits	--																																
L2.1	<p>Noise generated at the premises must not exceed the noise limits presented in the table below.</p> <p>Note:</p> <p>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.</p> <p>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 the Development Consent DA 92/97 (MOD1) dated 19 September 2011.</p>		<p>Evidence of noise monitoring in Annual Reviews. Note the 2017 Annual Review states: 'Operator attended monitoring was undertaken monthly by Global Acoustics Pty Ltd from January – June 2017 and quarterly thereafter, in accordance with the NMP and EPL 20850'. The 2018 Annual Review states: 'Operator attended monitoring was undertaken quarterly by Global Acoustics Pty Ltd from January – September 2018 and monthly thereafter during day, evening and/or night periods, in accordance with the NMP and EPL 20850'.</p> <p>Also evidence of noise monitoring results on the website. Noise monitoring reports and Annual Review state there has been no exceedance of noise criteria. Monitoring at the representative noise locations (Noise Assessment Groups (NAG's). Based on site consultation, the acoustics consultancy does not inform the mine of the exact day and time of monitoring therefore this eliminates the risk of operations changing to reduce noise.</p>	<p><u>As per recommendation from Schedule 3 Condition 5 of the Development Consent.</u></p> <p>REC: The monthly reports on the website should report against how the site compared against the cumulative noise criteria.</p> <p>REC: 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; and</li> <li>- compliance against cumulative criteria.</li> </ul> <p><b>NOTE - these recommendation have been addressed in the 2020 Annual Review and Monthly Reports</b></p>																														

# EPL 20850

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L2.2	<p>For the purpose of this licence the following definitions apply.</p> <p>NAG is to be read as 'Noise Assessment Group'.</p> <p>The locations of the Noise Assessment Groups are defined in Appendix 6 of the Determination of Development Application for the Mount Pleasant Coal Mine DA92/97, as modified on 19 September 2011.</p> <p>Day is defined as the period from 7am to 6pm Monday to Saturday and 8am to 6pm Sundays and Public Holidays.</p> <p>Evening is defined as the period from 6pm to 10pm.</p> <p>Night is defined as the period from 10pm to 7am Monday to Saturday and 10pm to 8am Sundays and Public Holidays.</p>	Note	Noted. Monitoring completed by an independent noise specialist. Monitoring periods are identified in the noise monitoring reports.																																																																																																																																																												
L2.3	<p>The noise limits set out in this licence apply under all meteorological conditions except for the following:</p> <p>a) Wind speeds greater than 3 metres/second at 10 metres above ground level; or</p> <p>b) Stability category F temperature inversion conditions and wind speeds greater than 2metres/second at 10 metres above ground level; or</p> <p>c) Stability category G temperature inversion conditions.</p> <p>For the purposes of this condition:</p> <p>i) Data recorded by the meteorological station within the licensed premises must be used to determine meteorological conditions; and</p> <p>ii) Temperature inversion conditions (stability category) are to be determined by the sigma-theta method referred to in Part E4 of Appendix E to the NSW Industrial Noise Policy.</p>	Note	Noted. Monitoring completed by an independent noise specialist. Meteorological conditions are reported in the noise monitoring reports.																																																																																																																																																												
L2.4	<p>Determining Compliance</p> <p>To determine compliance:</p> <p>a) with the LAeq(15 minute) noise limits in this licence, the noise measurement equipment must be located:</p> <p>i) approximately on the property boundary, where any dwelling is situated 30 metres or less from the property boundary closest to the premises; or</p> <p>ii) within 30 metres of a dwelling façade, but not closer than 3m, where any dwelling on the property is situated more than 30 metres from the property boundary closest to the premises; or,</p> <p>where applicable</p> <p>iii) within approximately 50 metres of the boundary of a National Park or a Nature Reserve.</p> <p>b) with the LA1(1 minute) noise limits in this licence, the noise measurement equipment must be located within 1 metre of a dwelling façade.</p> <p>c) with the noise limits in this licence, the noise measurement equipment must be located:</p> <p>i) at the most affected point at a location where there is no dwelling at the location; or</p> <p>ii) at the most affected point within an area at a location prescribed by part (a) or part (b) of this condition.</p>	Compliant	<p>Section 1.2 of the quarterly noise monitoring reports states:</p> <p><i>Monitoring locations are selected to represent the most noise affected residence in each of the Noise Affected Groups (NAG). Suitable monitoring locations, where noise levels are likely to be higher than those measured at the residence, are chosen to take a conservative approach as the direct measurement of noise 1 metre from the dwelling facades or within 30 metres of the residence is often impractical due to access requirements, the presence of dogs, air conditioners and other noise sources at the residences.</i></p> <p>The selection of noise monitoring locations in this manner is considered an appropriate methodology to determine compliance and is in accordance with the approved NMP.</p>																																																																																																																																																												
L2.5	Where it can be demonstrated that direct measurement of noise from the premises is impractical, the EPA may accept alternative means of determining compliance. See Chapter 11 of the NSW Industrial Noise Policy	Compliant																																																																																																																																																													

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Condition Number	Condition	Compliance Status	Evidence	Recommended Action
L2.6	A non-compliance with the noise limits specified in this licence will still occur where noise generated from the premises in excess of the appropriate limit is measured: i)at a location other than an area prescribed in part (a) and part (b) of condition L2.4; or ii)at a point other than the most affected point at a location.	Note	Noted. No noise non-compliances have been reported	
L2.7	For the purposes of determining the noise generated at the premises the modification factors in Section 4 of the NSW Industrial Noise Policy must be applied, as appropriate, to the noise levels measured by the noise monitoring equipment.	Compliant	The quarterly noise monitoring reports are prepared with consideration to appropriate modifying factors as specified in the EPA's 2017 Noise Policy for Industry (NPI). This document supersedes the INP and is considered appropriate for the assessment of modifying factors.	
L3	Blasting			
L3.1	Offensive blast fume must not be emitted from the premises.  Definition: <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>  <i>1. are harmful to (or likely to be harmful to) a person that is outside the premises from which it is emitted, or</i> <i>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.</i>	Compliant	* Offensive blast fume not reported in 2017 or 2018 Annual Reviews. * According to the 2017, 2018 and 2019 Complaints Registers there have been blasting complaints received during the audit period (including blast fumes).  The Annual Review and complaints logs state that in regards to blast fume but follow-up investigations indicated that no blast fume left the mine during the times of complaints.  BMP states: The number of blasts classified as Level 3 or above generated annually will be used as an indicator of blasting performance at the MPO. Blast monitoring results summary sheets present the blast rating however, these are not reported in the Annual Review or the EPL monthly reports	REC: Blast fume performance should be reported in the Annual Review and EPL monthly reports
L3.2	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.	Compliant	* 2017 -2020 register indicates blasts compliant for these hours.	As per Schedule 3 Condition 11.  REC: The time of the blasts for overpressure and vibration is not recorded in the Annual Review. To be included in future Annual Reviews. NOTE - this has been addressed in the 2019 Annual Review  REC: 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.
L3.3	The airblast overpressure level from blasting operations at the premises must not exceed 120dB (Lin Peak) at any time at any blast monitoring location specified in Condition P1.1.	Compliant	Potential blast exceedance notified within seven days. Following a study and detailed consultation with the DPIE concluded in a letter dated 7 February 2020 that the Department has determined that the blast did not cause exceedances of blasting criteria at any residence on privately owned land and therefore MACH Energy did not breach Schedule 3 Condition 10 of the Consent.  Based on site discussions and review of data there has been no non-compliances relating to criteria of this consent.	REC: Any elevated blasting levels (ie. Above 120 dBL) should be discussed in the monthly environmental reports and appropriate action detailed.
L3.4	The airblast overpressure level from blasting operations at the premises must not exceed 115dB(Lin Peak) for more than 5% of the total number of blasts during each reporting period at any blast monitoring location specified in Condition P1.1.	Compliant	As per blasting log and Annual Reviews, the site has been compliant with this condition. The 2019 period came close to the more than 5% exceedance with there being 3 blasts being over 115dBL at BV02, with these occurring across 67 blasts.	REC: Any elevated blasting levels (ie. Above 115 dBA) 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.  REC: Include a cumulative assessment of the percentage of blasts >115dB year to date to ensure <5%
L3.5	Ground vibration peak particle velocity from the blasting operations at the premises must not exceed 5mm/second at any blast monitoring location specified in Condition P1.1 for more than 5% of the total number of blasts during each reporting period.	Compliant	As per blasting log and Annual Reviews, the site has been compliant with this condition.	
L3.6	Ground vibration peak particle velocity from the blasting operations at the premises must not exceed 10mm/second at any time at any blast monitoring location specified in Condition P1.1.	Compliant	As per blasting log and Annual Reviews, the site has been compliant with this condition.	
L3.7	Error margins associated with any equipment used to measure airblast overpressure and/or ground vibration peak particle velocity are not to be taken into account in determining if the airblast overpressure or ground vibration peak particle velocity limits specified in conditions L3.3 to L3.6 inclusive, have been exceeded.	Compliant	Blasting completed by experienced contractors who are registered. Evidence of calibration of monitoring equipment sighted.	
L3.8	Noise sensitive location includes any residence, hospital, school, childcare centre, theatre, place of worship, other similar building occupied by people, and any land within 30 metres of any afore-mentioned building.  A noise sensitive location excludes: a)any of the afore-mentioned buildings or land that is the subject of a private agreement between the owner of the noise sensitive site and the licensee as to an alternative airblast overpressure or ground vibration level; or b)any premises owned by the licensee.	Note	Noted	
L4	Potentially offensive odour	--		
L4.1	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.	Compliant	Review of complaints log.  No odour incidents (offensive odour) according to the 2017, 2018, 2019 & 2020 incident registers.  One noise/ odour complaint from Collins Lane on 20 Feb 2020.  Preliminary assessment by the MACH Energy indicates the odour was not from MACH Energy. No reason to determine this as a non-compliance.	
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.	Compliant		
<b>4. Operating Conditions</b>				
O1	Activities must be carried out in a competent manner			

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O1.1	Licensed activities must be carried out in a competent manner. This includes: a)the processing, handling, movement and storage of materials and substances used to carry out the activity; and b)the treatment, storage, processing, reprocessing, transport and disposal of waste generated by the activity.	Non-Compliant (Low Risk)	<p>a) <u>Non-Compliant</u>: Dust issues (movement of material) identified with lack of water trucks along the haulage route on 25 March 2019 site inspection. See Section 5 of the main document for details.</p> <p>b) <u>Non-compliant</u>: Non - compliant for hydrocarbon and chemical storage.</p> <p><u>In-Pit Storage</u>:</p> <p>a) The general waste bins contained oily rags and cardboard.</p> <p>b) Oily rags were not stored in the oily rag bin. Instead, they were in bags on a pallet, with one bag open and oily rags spilling out on the ground.</p> <p>c) Small hydrocarbon spill.</p> <p><u>Workshop Area</u>:</p> <p>a) Unlabelled general waste bin.</p> <p>b) Oil drip from engine in storage area.</p> <p>c) Oil and flocculant were unbanded.</p> <p><u>Construction Offices</u>:</p> <p>a) Cardboard was in the general waste bin.</p> <p>b) Unbanded containers, oil drum and battery.</p> <p>c) Bagged contaminated soil from a diesel spill was in the storage area.</p>	<p>See Section 5.3 of the main report for dust recommendations.</p> <p>For waste as per Schedule 3 Condition 52 of the Development Consent.</p> <p><u>In - Pit Storage</u></p> <p>a) &amp; b) Ensure all waste is separated out and stored in the correct waste or recycle bin.</p> <p>c) Ensure all hydrocarbon spills are cleaned up.</p> <p><u>Workshop Area</u></p> <p>a) Ensure Remondis label all waste bins.</p> <p>b) Place oil pan under any engines/equipment stored in unbanded areas, that have the potential to drip any hydrocarbons/fluid etc.</p> <p>c) Ensure all chemicals/hydrocarbons are banded.</p> <p><u>Construction Offices</u></p> <p>a) Ensure all waste is separated out and stored in the correct waste or recycle bin.</p> <p>b) Ensure all chemicals/hydrocarbons are banded.</p> <p>c) Ensure all bagged contaminated soil is transported to the land farm.</p>
O2	Maintenance of plant and equipment			
O2.1	All plant and equipment installed at the premises or used in connection with the licensed activity: a)must be maintained in a proper and efficient condition; and b)must be operated in a proper and efficient manner.	Non-Compliant (Low Risk)	<p>a) Detailed JDE Plant Maintenance Schedule provided to SLR. This included evidence of past servicing and future servicing. This includes dozers, frana cranes and light vehicles.</p> <p>There was also evidence of the Thies Plant Maintenance Schedule.</p> <p>Evidence of realtime noise and air maintenance and calibration for PM10 monitors and noise monitors (Barr ows).</p> <p>b) <u>Non - Compliance for operating in a proper and efficient manner</u> - Based on the site inspection hauling of trucks was not being completed in an efficient manner. SLR witnessed hauling of trucks looking into the pit from around 11:30 - 12:10pm on 25 February 2020 and there was little use of watercarts for 90% of the haulage route. See Section 5.2 of the Audit Report for further details. Recommendations specifically relating to air quality are covered in other conditions.</p> <p>It should be noted however that 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. However despite this additional controls should have been installed. It is noted that no real time dust alarms were triggered at the time of the observations.</p>	See other conditions for specific recommendations.
O3	Dust			
O3.1	The premises must be maintained in a condition which minimises or prevents the emission of dust from the premises.	Non-Compliant (Low Risk)	<p>During the site inspection on 25 February 2020 noted that only a small section of the haul road to the BC pit was watered which means the site was not effectively minimising dust generation. Although no visible dust was seen leaving the site during the site inspection, effective mitigation measures were not implemented.</p> <p>By not using watertrucks the site was not maintaining roads to minimise dust.</p>	
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.	Non-Compliant (Low Risk)	<p>During the site inspection on 25 February 2020 noted that only a small section of the haul road to the BC pit was watered which means the site was not effectively minimising dust generation. Although no visible dust was seen leaving the site during the site inspection, effective mitigation measures were not implemented.</p>	<p><u>As per recommendations from Schedule 3 Condition 22 and 23 of the Development Consent.</u></p> <p>Recommend reviewing the way dust is visually assessed with this based on the EPAs new Dust Management Handbook 2019.</p>
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.	Non-Compliant (Low Risk)	<p>During the site inspection on 25 February 2020 noted that the haul road to the pit was not maintained in a condition (minimal use of the watercart) to effectively minimise dust. Although no visible dust was seen leaving the site during the site inspection, effective mitigation measures were not implemented.</p> <p>It is noted that the site has committed to progressive rehabilitation through the MOP.</p>	<p>Increased training in visual dust management at site. This should be regularly discussed and documented in toolbox talks.</p> <p>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 (eg. Reduction in speed) or operations are to cease until adequate dust controls are available.</p> <p>Update the MOP to include a defined timeframe to revegetate soil stockpiles.</p> <p>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</p>

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Condition Number	Condition	Compliance Status	Evidence	Recommended Action
O3.4	The licensee must cease all dust generating activities during adverse conditions being the occurrence of both the adverse wind conditions set out in Condition O3.5 (b) and the adverse PM 10 concentrations set out in Condition O3.5(c).	Administrative Non-Compliance	<p>There were numerous shut down days at the site based on the condition of the EPL. Some of the shutdown days in November and December 2019 were the result of excessive smoke across the region, rather than dust.</p> <p>Based on information provided to SLR there was one non - compliance regarding MACH Energy not implementing a shutdown within the required timeframe. MACH Energy received an official caution on 17 December 2019 as a shutdown on 24 October 2019 had exceeded the allowable 1 hour timeframe by 20 minutes. Whilst operations ceased within the hour (12:30pm), one haul truck continued until 12:34pm and three other haul trucks were reported to have continued hauling operations up until 12:50pm. MACH Energy has since implemented a procedure to ensure the site meets the timing requirements of shutdown conditions.</p> <p>SLR has labelled this an <u>Admin Non - Compliance</u> as there was no evidence any impacts associated with the slight delay in shutting down all operations.</p>	<p>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>It is recommended that the ambient air quality monitoring be undertaken in accordance with the Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales using a laboratory that is NATA accredited for the methods. If use of an approved method for the monitoring of ambient particulate levels is not possible, it is recommended that calibration of PM10 and PM2.5 be undertaken against a reference method (such as a TEOM) initially on a quarterly basis using a NATA accredited laboratory (noting that Carbon Based Environmental whose TEOM monitoring is the basis for the current calibration factors is not an accredited laboratory). If after 4 quarters of calibrations it is determined that no change to the calibration factor is required, then the frequency of calibration against the reference method could be reduced to 1 event per annum.</p> <p>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.</p>
O3.5	<p>For the purpose of Condition O3.4 the following definitions apply.</p> <p>(a)'dust generating activities' means drilling, blasting, earthworks, construction activities, all hauling activities on unsealed haul roads, all overburden and coal extraction operations including loading and dumping activities and grader, loader, dozer and dragline operations.</p> <p>(b)'adverse wind conditions' means a rolling 1-hour average wind direction between 250 degrees and 340 degrees (inclusive) measured at the Muswellbrook NW Upper Hunter Air Quality Monitoring Network monitor.</p> <p>Australian Standard AS3580.14-2014 is to be used to calculate the rolling 1 hour average wind direction.</p> <p>(c) 'adverse PM10 concentrations' means a rolling 24-hour average PM10 concentration of equal to or greater than 44 micrograms per cubic metre measured at the Muswellbrook NW Upper Hunter Air Quality Monitoring Network monitoring station.</p> <p>(d)Operation of watercarts is permitted at all times.</p> <p>(e)Activities within the Coal Handling and Preparation Plant and Materials Handling Area, including run-of-mine (ROM) coal, product coal handling (including dozer/loader operations) and train loading operations as identified in blue on plan titled 'Mt Pleasant Coal Mine Materials Handling Area Dust Exclusion Zone General Arrangement' drawing number MP001-0000-GEN-DRG-0026 (EPA ref Doc19/282883) are not included as dust generating activities provided all automated dust suppression spray systems at the ROM hopper, conveyor transfer points and product stockpiles are in use, at least one water cart is in use on the ROM stockpile and an adjustable hood is lowered onto rail wagons loadings.</p>	Note	Noted.	
O3.6	Shutdown of dust generating activities required by Condition O3.4 must be completed within 1 hour of receiving data that triggers action required by Condition O3.4.	Administrative Non-Compliance	<p>There was a large amount of evidence provided for dust shutdown days. Evidence provided by Thiess illustrating changed operations and shutdowns.</p> <p>Based on information provided to SLR this only occurred once however this still makes this a non - compliance. MACH Energy received an official caution as on 24 October 2019 the shutdown exceeded the allowable 1 hour timeframe by 20 minutes. Whilst operations ceased within the hour (12:30pm), one haul truck continued until 12:34pm and three other haul trucks were reported to have continued hauling operations up until 12:50pm.</p> <p>Generally it appears to site is implementing the appropriate shutdowns with only evidence provided for the one incident on 24 October 2019. MACH Energy has since implemented a procedure to ensure the site meets the timing requirements of shutdown conditions.</p>	As per recommendations from Schedule 3 Condition 23 of the Development Consent.
O3.7	The licensee may resume dust generating activities at the premises when: (a)adverse wind conditions as defined in Condition O3.5(b); or (b)adverse PM10 concentrations as defined in Condition O3.5(c) are not measured for a minimum time period of 1 hour from the time that cessation of dust generation activities is completed.	Compliant	No reason to determine non - compliance. The shutdown dates were provided to SLR and it appears operations only recommence when these conditions have been met.	
O3.8	<p>At any time when there is no access to the meteorological data or PM 10 data from the Muswellbrook NW Upper Hunter Air Quality Monitoring Network monitoring station, definitions of 'adverse wind conditions' and 'adverse PM10 concentrations' in condition O3.5 are replaced with :</p> <p>-'adverse wind conditions' means a rolling 1-hour average wind direction between 245 and 345 degrees (inclusive) measured at Monitoring Point No. 11, identified in condition P1.3</p> <p>-'adverse PM10 concentrations' means a 24-hour average PM10 concentration of equal to or greater than 44 micrograms per cubic metre measured at the Monitoring Point No. 1, identified in condition P1.3</p>	Compliant	Noted. Evidence of links to the Muswellbrook NW Upper Hunter Air Quality Monitoring Network monitoring station. Evidence of notifications. Also evidence of onsite meteorological station.	
Note:	If at any time, there is no access to the Muswellbrook NW Upper Hunter Air Quality Monitoring Network monitoring station and to either 1-hour average wind direction data from monitoring point 11 or PM 10 data from monitoring point 1 the licensee must cease dust generating activities at the premises.	Note		
O3.9	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.	Compliant	The site inspection did not indicate any visible dust leaving the site despite water trucks not being used in the pit circuit during the time of the inspection. Therefore technically compliant.	
O4	Emergency response			

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Condition Number	Condition	Compliance Status	Evidence	Recommended Action								
O4.1	The licensee must prepare a Pollution Incident Response Management Plan (PIRMP) as per section 153A of the Protection of the Environment Operations Act 1997. The PIRMP must: 1.Include the information detailed in section 153A of the Protection of the Environment Operations Act 1997, and to be in the form required by clause 98B in the Protection of the Environment Operations (General) Regulation. 2.Be kept at the premises to which the licence relates; and 3.Be tested in accordance with clause 98E of the Protection of the Environment Operations (General) Regulation.	Compliant	1. Pollution Incident Response Management Plan (PIRMP) has been prepared for the site. It is in a written form and is separate to any other document. 2. The PIRMP is maintained on the site in an electronic version. 3. A record of testing in Table 5 of the PIRMP. The PIRMP has been tested at least every 12 months.  No evidence provided that implementation was required.									
<b>5. Monitoring and Recording Conditions</b>												
M1	Monitoring records											
M1.1	The results of any monitoring required to be conducted by this licence or a load calculation protocol must be recorded and retained as set out in this condition.	Note										
M1.2	All records required to be kept by this licence must be: a) in a legible form, or in a form that can readily be reduced to a legible form; b) kept for at least 4 years after the monitoring or event to which they relate took place; and c) produced in a legible form to any authorised officer of the EPA who asks to see them.	Compliant	a) Monthly environmental monitoring reports provides monthly monitoring data in a legible form. b) Environmental monitoring data going back to 2012 provided. c) According to site communications monitoring data was only provided to EPA in response complaints.									
M1.3	The following records must be kept in respect of any samples required to be collected for the purposes of this licence: a) the date(s) on which the sample was taken; b) the time(s) at which the sample was collected; c) the point at which the sample was taken; and d) the name of the person who collected the sample.	Compliant	A sample of monthly environmental monitoring reports and noise monitoring reports included: a) Dates of which the sample was taken; b) Time(s) at which the sample was collected; and c) Point at which the sample was taken.  * Ambient Air Quality Monitoring Report from December 2019 includes operators names.									
M2	Requirement to monitor concentration of pollutants discharged											
M2.1	For each monitoring/discharge point or utilisation area specified below (by a point number), the licensee must monitor (by sampling and obtaining results by analysis) the concentration of each pollutant specified in Column 1. The licensee must use the sampling method, units of measure, and sample at the frequency, specified opposite in the other columns:	Note	Noted									
M2.2	Air Monitoring Requirements											
	<table border="1"> <thead> <tr> <th>Pollutant</th> <th>Units of measure</th> <th>Frequency</th> <th>Sampling Method</th> </tr> </thead> <tbody> <tr> <td>PM10</td> <td>milligrams per cubic metre</td> <td>Continuous</td> <td>Special Method 1</td> </tr> </tbody> </table>	Pollutant	Units of measure	Frequency	Sampling Method	PM10	milligrams per cubic metre	Continuous	Special Method 1	Administrative Non-Compliance	According to the 2018 Annual Review: <i>PM10 was not monitored continuously at Point 1 during the reporting period, with capture rate being 99% or 362 days out of 365. Equipment malfunction and power outage were the primary cause of data loss. No pollution or environmental harm occurred as a result of the non-compliance.</i> The site had a high percentage for recorded data.  PM10 reported as µg/m3 in 2017 and 2018 Annual Reviews.	No further recommendations as the site had a high percentage of data recording during the Audit period.
Pollutant	Units of measure	Frequency	Sampling Method									
PM10	milligrams per cubic metre	Continuous	Special Method 1									
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.	Note										
M2.3	Monitoring of all parameters listed in condition M2.1 must commence prior to earthmoving activities being undertaken at the premises.	Not Triggered	Outside of audit period.  May 2018 Audit Report by ERM determined that this condition was compliant.									
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.	Observation	Evidence of air quality monitoring data.  EPL 20850 describes monitoring points 1 and 2 (A-PF2 and A-PF5 respectively) as TEOM particulate monitors. The equipment used on site are Palas Fidas dust monitors which are not TEOMs. Palas Fidas dust monitors: - Use optical light scattering technology for the determination of particulate concentrations rather than tapered element oscillating microbalance technology used by TEOMs; - Have no associated Australian Standard; and - Have not been mentioned as an approved method for sampling of ambient PM10 concentrations in the Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales document.	As per specific recommendation from Schedule 3 Condition 22.  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.  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.								
Note:	The Protection of the Environment Operations (Clean Air) Regulation 2010 requires testing for certain purposes to be conducted in accordance with test methods contained in the publication "Approved Methods for the Sampling and Analysis of Air Pollutants in NSW".	Observation	Evidence of air quality monitoring data.  Evidence of air quality monitoring reports.  Evidence of standards being referenced in Section 2.3 of the Air Quality Monitoring Reports (including December 2019 report). Monitoring and analysis completed by independent specialists.  <i>However see comment above about Palas Fidas monitors.</i>									
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.	--	--									

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Condition Number	Condition	Compliance Status	Evidence	Recommended Action																																																							
	<p><b>POINT 11</b></p> <table border="1"> <thead> <tr> <th>Parameter</th> <th>Sampling method</th> <th>Units of measure</th> <th>Averaging period</th> <th>Frequency</th> </tr> </thead> <tbody> <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> </tbody> </table> <p><b>POINT 4</b></p> <table border="1"> <thead> <tr> <th>Parameter</th> <th>Sampling method</th> <th>Units of measure</th> <th>Averaging period</th> <th>Frequency</th> </tr> </thead> <tbody> <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 Sling</td> <td>AM-1</td> <td>percent</td> <td>1 hour</td> <td>Continuous</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> </tbody> </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 Sling	AM-1	percent	1 hour	Continuous	Temperature at 10 metres	AM-4	degrees Celsius	10 minutes	Continuous	Total Solar Radiation	AM-4	Watts per square metre	10 minutes	Continuous	Administrative Non-Compliance	<p>* Annual Returns refer to monitoring points 11 and 4.</p> <p>January 2019 Monthly Environmental Monitoring Report states:  <i>Weather data is measured continuously at the Kayuga Road meteorological station (M-WS4) (Point 4). In addition to air quality parameters, the weather station also measures wind speed and direction, temperature (at 2 m and 10 m), solar radiation, relative humidity, rainfall, atmospheric pressure, and sigma theta. All data was captured during January 2019.</i></p> <p>The site did have some times during the audit period where there was no data due to power outages, however the site still had a high percentage of recorded data. As this was not continuous during the Audit period the site is non-compliant with this condition.</p>	No further recommendations as the site had a high percentage of data recording during the Audit period.
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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M4.2	All methods specified in conditions M4.1 are specified in the Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales ('Approved Methods') and all monitoring must be conducted strictly in accordance with the requirements outlined the Approved Methods.	Note																																																									
M4.3	Monitoring of all parameters listed in M4.1 must commence prior to earthmoving activities being undertaken at the site.	Compliant	Earthworks commenced prior to this audit period.																																																								
M5	Recording of pollution complaints																																																										
M5.1	The licensee must keep a legible record of all complaints made to the licensee or any employee or agent of the licensee in relation to pollution arising from any activity to which this licence applies.	Compliant	Evidence of complaints log dating back past four years.																																																								
M5.2	The record must include details of the following: a)the date and time of the complaint; b)the method by which the complaint was made; c)any personal details of the complainant which were provided by the complainant or, if no such details were provided, a note to that effect; d)the nature of the complaint; e)the action taken by the licensee in relation to the complaint, including any follow-up contact with the complainant; and f)if no action was taken by the licensee, the reasons why no action was taken.	Compliant	Evidence of complaints log for the entire Audit period. Covers sub components a-f.																																																								
M5.3	The record of a complaint must be kept for at least 4 years after the complaint was made.	Compliant	Evidence of complaints log dating back past four years.																																																								
M5.4	The record must be produced to any authorised officer of the EPA who asks to see them	Compliant	Evidence of complaints log dating back past four years.																																																								
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.	Compliant	Evidence of complaints line.																																																								
M6.2	The licensee must notify the public of the complaints line telephone number and the fact that it is a complaints line so that the impacted community knows how to make a complaint.	Compliant	Newsletter drops in the 2333 post code. Also evidence on website.																																																								
M6.3	The preceding two conditions do not apply until two weeks from the date of the issue of this licence.	Note	Noted																																																								
M7	Blasting																																																										
M7.1	To determine compliance with conditions L3.3, L3.4, L3.5 and L3.6: a)Airblast overpressure and ground vibration levels must be measured and electronically recorded for monitoring point 3 for the parameters specified in column 1 of the table below; and b)The licensee must use the units of measure, sampling method and sample at the frequency specified opposite in the other columns.	--	--																																																								
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EPA Identification number	Parameter	Unit of measure	Frequency	Sampling Method																																																							
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M8	Other monitoring and recording conditions																																																										
M8.1	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.	Administrative Non-Compliance	<p>Evidence of PM10 results.</p> <p>According to the 2018 Annual Review:  <i>PM10 was not monitored continuously at Point 1 during the reporting period, with capture rate being 99% or 362 days out of 365. Equipment malfunction and power outage were the primary cause of data loss. No pollution or environmental harm occurred as a result of the non-compliance.</i> The site had a high percentage for recorded data.</p> <p>There were times during 2017 and 2019 where there was no data capture. It should be noted that this is a common issue for this equipment and the site has maintained a high data capture rate.</p>	No further recommendations as the site had a high percentage of data recording during the Audit period.																																																							
M9	Noise monitoring																																																										

# EPL 20850

Condition Number	Condition	Compliance Status	Evidence	Recommended Action
M9.1	To assess compliance with the noise limits specified in condition L2.1, the licensee must undertake attended noise monitoring in accordance with condition L2.4 and the following requirements: a) be undertaken during a period that is representative of typical operating conditions and not undertaken during a shutdown period; b) be undertaken at each one of the locations or at a location representative of the most-affected locations listed in condition L2.1; c) be undertaken monthly in a reporting period; and d) be undertaken for a minimum duration of 15 minutes within an assessment period.	Compliant	Evidence of noise monitoring reports. Evidence of monitoring in the Annual Review. Completed by independent experienced environmental consultant. Note the frequency of monitoring changed during the Audit period, however based on the information provided the site has met this requirement.	
Note:	Night time noise monitoring is not required to be undertaken until night operations commence at the premises.	Noted	Noise monitoring is completed at night.	
<b>6. Reporting Conditions</b>				
R1	Annual return documents			
R1.1	The licensee must complete and supply to the EPA an Annual Return in the approved form comprising: 1.a Statement of Compliance, 2.a Monitoring and Complaints Summary, 3.a Statement of Compliance - Licence Conditions, 4.a Statement of Compliance - Load based Fee, 5.a Statement of Compliance - Requirement to Prepare Pollution Incident Response Management Plan, 6.a Statement of Compliance - Requirement to Publish Pollution Monitoring Data; and 7.a Statement of Compliance - Environmental Management Systems and Practices.  At the end of each reporting period, the EPA will provide to the licensee a copy of the form that must be completed and returned to the EPA.	Compliant	Evidence of Annual Returns as per the EPA forms.	
R1.2	An Annual Return must be prepared in respect of each reporting period, except as provided below.	Compliant	Evidence of Annual Returns as per the EPA forms. Period is from 24 November - 23 November.	
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.	--	--	
R1.3	Where this licence is transferred from the licensee to a new licensee: a) the transferring licensee must prepare an Annual Return for the period commencing on the first day of the reporting period and ending on the date the application for the transfer of the licence to the new licensee is granted; and b) the new licensee must prepare an Annual Return for the period commencing on the date the application for the transfer of the licence is granted and ending on the last day of the reporting period.	Not Triggered	Not triggered. No transfer during the audit period.	
Note:	An application to transfer a licence must be made in the approved form for this purpose.	--	--	
R1.4	Where this licence is surrendered by the licensee or revoked by the EPA or Minister, the licensee must prepare an Annual Return in respect of the period commencing on the first day of the reporting period and ending on: a) in relation to the surrender of a licence - the date when notice in writing of approval of the surrender is given; or b) in relation to the revocation of the licence - the date from which notice revoking the licence operates.	Not Triggered	Not triggered	
R1.5	The Annual Return for the reporting period must be supplied to the EPA via eConnect EPA or by registered post not later than 60 days after the end of each reporting period or in the case of a transferring licence not later than 60 days after the date the transfer was granted (the 'due date').	Compliant	Annual Returns meet the timing requirement.	
R1.6	The licensee must retain a copy of the Annual Return supplied to the EPA for a period of at least 4 years after the Annual Return was due to be supplied to the EPA.	Compliant	Evidence provided for 4 years of Annual Returns. Also noted submission on EPA website.	
R1.7	Within the Annual Return, the Statements of Compliance must be certified and the Monitoring and Complaints Summary must be signed by: a) the licence holder; or b) by a person approved in writing by the EPA to sign on behalf of the licence holder.	Compliant	Evidence of signed Annual Returns. Evidence of EPA accepting Annual Returns via website.	
R2	Notification of environmental harm			
R2.1	Notifications must be made by telephoning the Environment Line service on 131 555.	Not Triggered	Based on information provided this has not been triggered.	
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.	--	--	
R2.2	The licensee must provide written details of the notification to the EPA within 7 days of the date on which the incident occurred.	Not Triggered	Based on information provided this has not been triggered.	
R3	Written report			
R3.1	Where an authorised officer of the EPA suspects on reasonable grounds that: a) where this licence applies to premises, an event has occurred at the premises; or b) where this licence applies to vehicles or mobile plant, an event has occurred in connection with the carrying out of the activities authorised by this licence, and the event has caused, is causing or is likely to cause material harm to the environment (whether the harm occurs on or off premises to which the licence applies), the authorised officer may request a written report of the event.	Not Triggered	Based on information provided this has not been triggered.	
R3.2	The licensee must make all reasonable inquiries in relation to the event and supply the report to the EPA within such time as may be specified in the request.	Not Triggered	Based on information provided this has not been triggered.	
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.	Not Triggered	Based on information provided this has not been triggered.	
R3.4	The EPA may make a written request for further details in relation to any of the above matters if it is not satisfied with the report provided by the licensee. The licensee must provide such further details to the EPA within the time specified in the request.	Not Triggered	Based on information provided this has not been triggered.	
R4	Other reporting conditions			
R4.1	Reporting of Blast Monitoring The licensee must report any exceedance of the licence blasting limits identified in condition L3.3, L3.4, L3.5 and L3.6 by calling the EPA's Environment Line on 131 555 as soon as practicable after the exceedance becomes known to the licensee or to one of the licensee's employees or agents.  If the exceedance is likely to cause material harm to the environment, the notification requirements of Part 5.7 of the Act apply.	Compliant	Overpressure for 1 blast was above 120 dBL, with this being recorded at 124.5 dBL on 21 October 2019 at the BV02 blast monitor. Following a study and detailed consultation with the DPIE, the DPIE concluded in a letter dated 7 February 2020 that 'the Department has determined that the blast did not cause exceedances of blasting criteria at any residence on privately owned land and therefore MACH Energy did not breach Schedule 3 Condition 10 of the Consent'.  Correspondence provided to the EPA.	
R4.2	The results of the blast monitoring required by condition M8.1 must be submitted to the EPA at the end of each reporting period.	Compliant	Blast monitoring results included in Annual Returns. Also in Annual Reviews.	



# EPL 20850

Condition Number	Condition	Compliance Status	Evidence	Recommended Action
R4.3	<p>Noise Monitoring Report</p> <p>A noise compliance assessment report must be submitted to the EPA within 3 months of the commencement of operations, and every 12 months thereafter and be submitted with the Annual Return. The report must:</p> <p>a) be prepared by an accredited acoustic consultant and determine compliance with noise limits presented in condition L2.1;</p> <p>b) include all routine attended monitoring undertaken throughout the year;</p> <p>c) include measurement and reporting of C-weighted noise levels; and</p> <p>d) outline of any management actions taken within the monitoring period to address any exceedances of the limits contained in condition L2.1.</p>	Compliant	Evidence sighted of the submission of these Noise Monitoring Reports.	
R4.4	The licensee must notify the EPA in writing of any exceedance of the noise criteria in this licence immediately after the licensee becomes aware of the exceedance.	Not Triggered	Based on the information provided this condition has not been triggered.	
R4.5	<p>Dust Monitoring Report</p> <p>The licensee must prepare a report containing the following information (as a minimum) for each reporting period:</p> <p>a) Details of times, wind speeds and wind direction during 'adverse conditions'.</p> <p>b) The date and time when dust generating activities were ceased in accordance with condition O3.4;</p> <p>c) Weather conditions monitored at Monitoring Point 4:</p> <p>i. during the period when dust generating activities were ceased;</p> <p>ii. for the 24 hour period immediately prior to dust generating activities being ceased; and</p> <p>iii. for the 24 hour period immediately after dust generating activities resumed.</p> <p>d) PM10 monitoring data measured at Monitoring Points 1 and 2:</p> <p>i. during the period when dust generating activities were ceased;</p> <p>ii. for the 24 hour period immediately prior to dust generating activities being ceased; and</p> <p>iii. for the 24 hour period immediately after dust generating activities resumed.</p> <p>e) The date and time dust generating activities were resumed;</p> <p>f) A list of days when average 24 hour PM10 at the Muswellbrook Upper Hunter Air Quality Monitoring Network monitor exceeded 50µg/m3.</p> <p>g) 10 minute wind speed and direction data at Monitoring Point 4 on days recorded under condition R4.4 f).</p> <p>h) 10 minute PM10 data from monitoring points 1 and 2 for days recorded under condition R4.4 f).</p>	Compliant	Evidence of the submission of dust monitoring data spreadsheet to meet these condition requirements. Submitted with the EPL Annual Returns.	
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 50µg/m3. The EPA may review these conditions if this objective is not being achieved.	Note	Noted	
<b>7. General Conditions</b>				
G1	Copy of licence kept at the premises or plant	Compliant	An electronic copy at the licence is kept at the premises.	
G1.1	A copy of this licence must be kept at the premises to which the licence applies.	Compliant	An electronic copy at the licence is kept at the premises.	
G1.2	The licence must be produced to any authorised officer of the EPA who asks to see it.	Not Triggered	An authorised officer of the EPA has not asked for a copy of the EPL during the audit period.	
G1.3	The licence must be available for inspection by any employee or agent of the licensee working at the premises.	Compliant	An electronic copy at the licence is kept at the premises.	
G2	Contact number for incidents and responsible employees	Compliant	PIRMP includes number for incidents and responsible employees.	
G2.1	The licensee is to inform the EPA of the contact number within 3 months of this condition taking effect.	Compliant	Outside of the audit period.	

# Statement of Commitments

Condition Number	Condition	Compliance Status	Evidence	Recommended Action
<b>APPENDIX 3 - STATEMENT OF COMMITMENTS</b>				
<b>Environmental aspect</b>	<b>Commitment</b>			
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>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>	Compliant	<p>The Noise Management Plan includes the requirements of MOD 4.</p> <p>Evidence of implementation of general noise management mitigation measures. Note, MOD 4 works have not yet been enacted.</p> <p>No evidence provided of specific spending regarding noise mitigation, however it is noted the site has met the Development Consent noise criteria. Evidence of noise suppression on mobile plant.</p>	
Ecology	<ul style="list-style-type: none"> <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>	Compliant	<p>There is a MOP, not a REMP.</p> <p>Decommissioning details included in the MOP.</p> <p>No evidence provided for ecological non-compliances. Ecological monitoring was provided.</p> <p>Non-compliance with the AQMP in terms of watering of haul roads. Section 9.2 of the AQMP states:</p> <p><i>'Watercarts will be utilised as necessary to minimise excessive visible dust.'</i></p> <p>Air quality issues identified during the site inspection component of the audit. See Section 5.3 of the report for further details. Issues relating to dust from haul roads in the pit circuit and dust from the Excavator dumping overburden into the haul truck. The lack of a watercart when viewing into BC pit on 25 February 2020 across the majority of the haulage route was not evidence of best practice. The dust was also above the visual assessment levels in the EPA Dust Assessment Handbook 2019 and additional mitigation measures should have been implemented.</p> <p>It should be noted however that 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. However despite this additional controls should have been installed. It is noted that no real time dust alarms were triggered at the time of the observations.</p> <p>It was noted during the site inspection that some areas of soil stockpiles have not yet been seeded. These should be seeded. It is noted that the current commitment in the AQMP does not designate a timeframe for seeding of stockpiles.</p> <p>Long-term stockpiles will be revegetated as soon as practicable following completion.</p>	
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>	Non-Compliant (Low Risk)	<p>As per Schedule 3 Condition 22 and 23 recommendations.</p>	
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>	Compliant	<p>No evidence of non-compliances associated with Aboriginal Cultural Heritage.</p> <p>Effective implementation of the Aboriginal Heritage Management Plan. Evidence of pre clearance permits and salvage requirements.</p>	
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>	Compliant	<p>Evidence of Visual Impact Management Plan.</p> <p>No major issues identified during the audit. Evidence of some complaints including investigations.</p>	
Removal of Mount Pleasant in 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:           <ol style="list-style-type: none"> <li>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>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>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>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> </ol> </li> <li>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.</li> </ul>	Not Triggered	Not triggered	

# Statement of Commitments

Condition Number	Condition	Compliance Status	Evidence	Recommended Action
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>no more than 0.1 m increase in flood levels on any privately-owned land;</li> <li>no more than 0.01 m increase in flood levels at any privately-owned dwellings or commercial spaces;</li> <li>no more than 0.01 m increase in flood levels at any public roads servicing privately-owned properties; and</li> <li>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>	Not Triggered	Design is not yet finalised.	
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>	Not Triggered	Noise Management Plan has been prepared for MOD 4 but the final design has not yet been completed.	
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>	Not Triggered	Not triggered	
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>	Compliant	Evidence of visual vegetation screen inspections. Areas inspected once per month.	
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>	Compliant	This is in the CEMP. Council and DPIE were consulted as part of the project. Implementation of the plan is not yet triggered however.	
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 Heritage Act 1977 and whether works should proceed pursuant to an application for an 'exception', or an excavation permit.</li> </ul>	Not Triggered	Not yet triggered. However this commitment has been completed. 6 February 2020 from MACH Energy to Council. Council accepted this on 12 February 2020. MACH Energy will consult with Council on the content of the photographic record of Overton Orchard and Race Track.	

# ML 1645 (Act 1992)

Condition Number	Condition	Compliance Status	Evidence	Recommended Action
<b>Mining Lease Conditions 2013</b>				
<b>1. Notice to Landholders</b>				
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.	Compliant	Based on site correspondence there has been no lease renewal.	
1 (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.	Compliant	N/A	
<b>2. Rehabilitation</b>				
2	Any disturbance resulting from the activities carried out under this mining lease must be rehabilitated to the satisfaction of the Minister.	Compliant	<p>Rehabilitation status reported in the 2017 - 2019 Annual Reviews.</p> <p>According to site communications in August 2019 the Resource Regulator (RR) attended the site and reviewed rehabilitated areas. They were generally satisfied with the rehabilitation.</p> <p>According to site communications no notifications have been issued by RR in regards to improving rehabilitation.</p> <p>Only one notification (NTCE0004145) has been issued by RR, dated 1 November 2019 and this related to a rehabilitation risk assessment. According to site communications a risk assessment has been held and a Draft Mount Pleasant Operations Rehabilitation Risk Assessment Report is being prepared.</p> <p>Evidence of early phase of rehabilitation program during the site inspection. Evidence of some recent reshaping for failed rehabilitation area. Additional reshaping and new rehabilitation proposed for 2020.</p>	
<b>risk</b>				
3 (a)	The lease holder must comply with an approved Mining Operations Plan (MOP) in carrying out any significant surface disturbing activities, including mining operations, mining purposes and prospecting. The lease holder must apply to the Minister for approval of a MOP. An approved MOP must be in place prior to commencing any significant surface disturbing activities, including mining operations, mining purposes and prospecting.	Compliant	No evidence of non - compliances with the MOP regarding surface disturbance.	
3 (b)	The MOP must identify the post mining land use and set out a detailed rehabilitation strategy which: (i) identifies areas that will be disturbed; (ii) details the staging of specific mining operations, mining purposes and prospecting; (iii) identifies how the mine will be managed and rehabilitated to achieve the post mining land use; (iv) identifies how mining operations, mining purposes and prospecting will be carried out in order to prevent and or minimise harm to the environment; and (v) reflects the conditions of approval under: • the Environmental Planning and Assessment Act 1979; • the Protection of the Environment Operations Act 1997; and • any other approvals relevant to the development including the conditions of this mining lease.	Compliant	<p>Evidence of three MOPs from the period. Evidence of approval of these MOPs which cover a one year period.</p> <p>Based on site correspondence the MACH Energy the site will complete another 12 month MOP.</p> <p>Note there are some differences in figures between the MOP and Rehabilitation Strategy with recommendations outlined in Schedule 3 Condition 54.</p>	
3 (c)	The MOP must be prepared in accordance with the ESG3: Mining Operations Plan (MOP) Guidelines September 2013 published on the Department's website at <a href="http://www.resourcesandenergy.nsw.gov.au/miners-and-explorers/rules-and-forms/pgf/environmental-guidelines">www.resourcesandenergy.nsw.gov.au/miners-and-explorers/rules-and-forms/pgf/environmental-guidelines</a>	Compliant	Both MOP's have been prepared as per the guidelines.	
3 (d)	The lease holder may apply to the Minister to amend an approved MOP at any time.			
3 (e)	It is not a breach of this condition if: (i) the operations which, but for this condition 3(e) would be a breach of condition 3(a), were necessary to comply with a lawful order or direction given under the Environmental Planning and Assessment Act 1979, the Protection of the Environment Operations Act 1997, the Work Health and Safety (Mines and Petroleum Sites) Act 2013 and Work Health and Safety (Mines and Petroleum Sites) Regulation 2014 or the Work Health and Safety Act 2011; and Work Health and Safety Regulation 2011 (ii) the Minister had been notified in writing of the terms of the order or direction prior to the operations constituting the breach being carried out.	Noted		

# ML 1645 (Act 1992)

Condition Number	Condition	Compliance Status	Evidence	Recommended Action
3 (f)	The lease holder must prepare a Rehabilitation Report to the satisfaction of the Minister. The report must: (i) provide a detailed review of the progress of rehabilitation against the performance measures and criteria established in the approved MOP; (ii) be submitted annually on the grant anniversary date (or at such other times as agreed by the Minister); and (iii) be prepared in accordance with any relevant annual reporting guidelines published on the Department's website at <a href="http://www.resourcesandenergy.nsw.gov.au/miners-and-explorers/rules-and-forms/pgf/environmental-guidelines">www.resourcesandenergy.nsw.gov.au/miners-and-explorers/rules-and-forms/pgf/environmental-guidelines</a> Note: The Rehabilitation Report replaces the Annual Environmental Management Report.	Compliant	Included in the Annual Review with this provided to the RR.	
<b>4. Non-Compliance Reporting</b>				
4 (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;	Not Triggered	According to site communications there were no breaches of any conditions of this mining lease or breaches of the Mining Act or Regulations.	
4 (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.	Not Triggered	No evidence of breaches provided to SLR.	
<b>5. Environmental Incident Report</b>				
	The lease holder must provide environmental incident notifications and reports to the Secretary no later than seven (7) days after those environmental incident notifications and reports are provided to the relevant authorities under the Protection of the Environment Operations Act 1997.	Not Triggered	No evidence of environmental incidents that causes material harm under the POEO Act.	
<b>6. Extraction Plan</b>				
6 (a)	In this condition:  (i) approved Extraction Plan means a plan, being:  A. an extraction plan or subsidence management plan approved in accordance with the conditions of a relevant development consent and provided to the Secretary; or B. a subsidence management plan relating to the mining operations subject to this lease: I. submitted to the Secretary on or before 31 December 2014; and  II. approved by the Secretary.  (ii) relevant development consent means a development consent or project approval issued under the Environmental Planning & Assessment Act 1979 relating to the mining operations subject to this lease.	Not Triggered	Open cut mine. Not Applicable.	
6 (b)	The lease holder must not undertake any underground mining operations that may cause subsidence except in accordance with an approved Extraction Plan.	Not Triggered	Open cut mine. Not Applicable.	
6 (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.	Not Triggered	Open cut mine. Not Applicable.	
6 (d)	The lease holder must notify the Secretary within 48 hours of any:  (i) incident caused by subsidence which has a potential to expose any person to health and safety risks; (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 (iii) significant failure or malfunction of a monitoring device or risk control measure set out in the approved Extraction Plan addressing: A. built features; B. public safety; or C. subsidence monitoring.	Not Triggered	Open cut mine. Not Applicable.	
	The lease holder must optimise recovery of the minerals that are the subject of this mining lease to the extent economically feasible.	Compliant	No reason to determine non compliance.	
<b>8. Group Security</b>				

# ML 1645 (Act 1992)

Condition Number	Condition	Compliance Status	Evidence	Recommended Action
	<p>The lease holder is required to provide and maintain a security deposit to secure funding for the fulfilment of obligations of all or any kind under the mining lease, including obligations of all or any kind under the mining lease that may arise in the future. The amount of the security deposit to be provided as a group security has been assessed by the Minister at \$17,956,000. The leases covered by the group security include:</p> <p><b>Mining Lease 1645 (Act 1992)</b></p> <p><b>Mining Lease 1708 (Act 1992)</b></p> <p><b>Mining Lease 1709 (Act 1992)</b></p> <p><b>Mining Lease 1713 (Act 1992)</b></p> <p><b>Mining Lease 1750 (Act 1992)</b></p>	Compliant	<p>* Letter from DPIE dated 29/7/2019 approving an increase in the security deposit to \$52,073,000.</p> <p>* "Details of Mining Lease 1645 (Act 1992)" states the securities held by DPIE.</p>	
<b>9. Cooperation Agreement</b>				
	<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>	Compliant	Overlapping title cooperation agreements in place Sighted agreement with Bengalla.	
<b>Exploration Reporting</b>				
Note:	<p><i>Exploration Reports (Geological and Geophysical)</i></p> <p>The lease holder must lodge reports to the satisfaction of the Minister in accordance with section 163C of the Mining Act 1992 and in accordance with clause 59 of the Mining Regulation 2016. Reports must be prepared in accordance with <i>Exploration Reporting: A guide for reporting on exploration and prospecting in New South Wales</i>.</p>	Compliant	Evidence of exploration reports across the period. Most recent report covers 17 December 2018 to 16 December 2019.	
<b>Special Conditions</b>				
Note:	The standard conditions apply to all mining leases. The Division of Resources and Geoscience (DRG) reserves the right to impose special conditions, based on individual circumstances, where appropriate.	Note	Noted	

# ML 1708 Licence Instrument

Condition Number	Condition	Compliance Status	Evidence	Recommended Action
<b>Mining Lease Conditions 2013</b>				
<b>1. Notice to Landholders</b>				
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.	Compliant	Based on site correspondence there has been no lease renewal.	
1 (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.	Compliant	N/A	
<b>2. Rehabilitation</b>				
	Any disturbance resulting from the activities carried out under this mining lease must be rehabilitated to the satisfaction of the Minister.	Compliant	<p>Rehabilitation status reported in the 2017 - 2019 Annual Reviews.</p> <p>According to site communications in August 2019 the Resource Regulator (RR) attended the site and reviewed rehabilitated areas. They were generally satisfied with the rehabilitation.</p> <p>According to site communications no notifications have been issued by RR in regards to improving rehabilitation.</p> <p>Only one notification (NTCE0004145) has been issued by RR, dated 1 November 2019 and this related to a rehabilitation risk assessment. According to site communications a risk assessment has been held and a Draft Mount Pleasant Operations Rehabilitation Risk Assessment Report is being prepared.</p> <p>Evidence of early phase of rehabilitation program during the site inspection. Evidence of some recent reshaping for failed rehabilitation area. Additional reshaping and new rehabilitation proposed for 2020.</p>	
<b>3. Mining Operations Plan and Annual Rehabilitation Report</b>				
3 (a)	The lease holder must comply with an approved Mining Operations Plan (MOP) in carrying out any significant surface disturbing activities, including mining operations, mining purposes and prospecting. The lease holder must apply to the Minister for approval of a MOP. An approved MOP must be in place prior to commencing any significant surface disturbing activities, including mining operations, mining purposes and prospecting.	Compliant	No evidence of non compliances with the MOP regarding surface disturbance.	
3 (b)	The MOP must identify the post mining land use and set out a detailed rehabilitation strategy which: (i) identifies areas that will be disturbed; (ii) details the staging of specific mining operations, mining purposes and prospecting; (iii) identifies how the mine will be managed and rehabilitated to achieve the post mining land use; (iv) identifies how mining operations, mining purposes and prospecting will be carried out in order to prevent and or minimise harm to the environment; and (v) reflects the conditions of approval under: -the Environmental Planning and Assessment Act 1979; -the Protection of the Environment Operations Act 1997; and -any other approvals relevant to the development including the conditions of this mining lease.	Compliant	<p>Evidence of three MOPs from the period. Evidence of approval of these MOPs which cover a one year period.</p> <p>Based on site correspondence the MACH Energy the site will complete another 12 month MOP.</p>	
3 (c)	The MOP must be prepared in accordance with the ESG3: Mining Operations Plan (MOP) Guidelines September 2013 published on the Department's website at <a href="http://www.resourcesandenergy.nsw.gov.au/miners-and-explorers/rules-and-forms/pgf/environmental-guidelines">www.resourcesandenergy.nsw.gov.au/miners-and-explorers/rules-and-forms/pgf/environmental-guidelines</a>	Compliant	Both MOP's have been prepared as per the guidelines.	
3 (d)	The lease holder may apply to the Minister to amend an approved MOP at any time.			
3 (e)	It is not a breach of this condition if: (i) the operations which, but for this condition 3(e) would be a breach of condition 3(a), were necessary to comply with a lawful order or direction given under the Environmental Planning and Assessment Act 1979, the Protection of the Environment Operations Act 1997, the Work Health and Safety (Mines and Petroleum Sites) Act 2013 and Work Health and Safety (Mines and Petroleum Sites) Regulation 2014 or the Work Health and Safety Act 2011; and Work Health and Safety Regulation 2011 (ii) the Minister had been notified in writing of the terms of the order or direction prior to the operations constituting the breach being carried out.	Noted		
3 (f)	The lease holder must prepare a Rehabilitation Report to the satisfaction of the Minister. The report must: (i) provide a detailed review of the progress of rehabilitation against the performance measures and criteria established in the approved MOP; (ii) be submitted annually on the grant anniversary date (or at such other times as agreed by the Minister); and (iii) be prepared in accordance with any relevant annual reporting guidelines published on the Department's website at <a href="http://www.resourcesandenergy.nsw.gov.au/miners-and-explorers/rules-and-forms/pgf/environmental-guidelines">www.resourcesandenergy.nsw.gov.au/miners-and-explorers/rules-and-forms/pgf/environmental-guidelines</a>  <i>Note: The Rehabilitation Report replaces the Annual Environmental Management Report.</i>	Compliant	Included in the Annual Review with this provided to the RR.	
<b>4. Non-Compliance Reporting</b>				
4 (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;	Not Triggered	According to site communications there were no breaches of any conditions of this mining lease or breaches of the Mining Act or Regulations.	
4 (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.	Not Triggered	No evidence of breaches provided to SLR.	
<b>5. Environmental Incident Report</b>				
	The lease holder must provide environmental incident notifications and reports to the Secretary no later than seven (7) days after those environmental incident notifications and reports are provided to the relevant authorities under the Protection of the Environment Operations Act 1997.	Not Triggered	No evidence of environmental incidents that causes material harm under the POEO Act.	
<b>6. Extraction Plan</b>				
6 (a)	In this condition:  (i) approved Extraction Plan means a plan, being: A an extraction plan or subsidence management plan approved in accordance with the conditions of a relevant development consent and provided to the Secretary; or B a subsidence management plan relating to the mining operations subject to this lease; I. submitted to the Secretary on or before 31 December 2014; and II. approved by the Secretary.  (ii) relevant development consent means a development consent or project approval issued under the Environmental Planning & Assessment Act 1979 relating to the mining operations subject to this lease.	Not Triggered	Open cut mine. Not Applicable.	
6 (b)	The lease holder must not undertake any underground mining operations that may cause subsidence except in accordance with an approved Extraction Plan.	Not Triggered	Open cut mine. Not Applicable.	
6 (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.	Not Triggered	Open cut mine. Not Applicable.	

# ML 1708 Licence Instrument

Condition Number	Condition	Compliance Status	Evidence	Recommended Action
6 (d)	The lease holder must notify the Secretary within 48 hours of any: (i) incident caused by subsidence which has a potential to expose any person to health and safety risks; (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 (iii) significant failure or malfunction of a monitoring device or risk control measure set out in the approved Extraction Plan addressing: A. built features; B. public safety; or C. subsidence monitoring.	Not Triggered	Open cut mine. Not Applicable.	
<b>7. Resource Recovery</b>				
	The lease holder must optimise recovery of the minerals that are the subject of this mining lease to the extent economically feasible.	Compliant	No reason to determine non compliance.	
<b>8. Group Security</b>				
	The lease holder is required to provide and maintain a security deposit to secure funding for the fulfilment of obligations of all or any kind under the mining lease, including obligations of all or any kind under the mining lease that may arise in the future. The amount of the security deposit to be provided as a group security has been assessed by the Minister at \$17,956,000. The leases covered by the group security include:  <b>Mining Lease 1645 (Act 1992)</b>  <b>Mining Lease 1708 (Act 1992)</b>  <b>Mining Lease 1709 (Act 1992)</b>  <b>Mining Lease 1713 (Act 1992)</b>  <b>Mining Lease 1750 (Act 1992)</b>	Compliant	* Letter from DPIE dated 29/7/2019 approving an increase in the security deposit to \$52,073,000. * "Details of Mining Lease 1645 (Act 1992)" states the securities held by DPIE.	
<b>9. Cooperation Agreement</b>				
	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:  - access arrangements - operational interaction procedures - dispute resolution - information exchange - well location - timing of drilling - potential resource extraction conflicts; and - rehabilitation issues.	Not Triggered	Not overlapping with any other MLs.	
<b>Exploration Reporting</b>				
Note:	<i>Exploration Reports (Geological and Geophysical)</i>  The lease holder must lodge reports to the satisfaction of the Minister in accordance with section 163C of the Mining Act 1992 and in accordance with clause 59 of the Mining Regulation 2016. Reports must be prepared in accordance with <i>Exploration Reporting: A guide for reporting on exploration and prospecting in New South Wales</i> .	Compliant	Evidence of exploration reports across the period. Most recent report covers 17 December 2018 to 16 December 2019.	
<b>Special Conditions</b>				
Note:	The standard conditions apply to all mining leases. The Division of Resources and Geoscience (DRG) reserves the right to impose special conditions, based on individual circumstances, where appropriate.	Note	Noted	



# ML 1709 Licence Instrument

Condition Number	Condition	Compliance Status	Evidence	Recommended Action
<b>Mining Lease Conditions 2013</b>				
<b>1. Notice to Landholders</b>				
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.	Compliant	Based on site discussions there has been no conditions triggered the lease renewal.	
1 (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.	Compliant	N/A	
<b>2. Rehabilitation</b>				
	Any disturbance resulting from the activities carried out under this mining lease must be rehabilitated to the satisfaction of the Minister.	Compliant	<p>Rehabilitation status reported in the 2017 - 2019 Annual Reviews.</p> <p>According to site communications in August 2019 the Resource Regulator (RR) attended the site and reviewed rehabilitated areas. They were generally satisfied with the rehabilitation.</p> <p>According to site communications no notifications have been issued by RR in regards to improving rehabilitation.</p> <p>Only one notification (NTCE0004145) has been issued by RR, dated 1 November 2019 and this related to a rehabilitation risk assessment. According to site communications a risk assessment has been held and a Draft Mount Pleasant Operations Rehabilitation Risk Assessment Report is being prepared.</p> <p>Evidence of early phase of rehabilitation program during the site inspection. Evidence of some recent reshaping for failed rehabilitation area. Additional reshaping and new rehabilitation proposed for 2020.</p>	
<b>3. Mining Operations Plan and Annual Rehabilitation Report</b>				
3 (a)	The lease holder must comply with an approved Mining Operations Plan (MOP) in carrying out any significant surface disturbing activities, including mining operations, mining purposes and prospecting. The lease holder must apply to the Minister for approval of a MOP. An approved MOP must be in place prior to commencing any significant surface disturbing activities, including mining operations, mining purposes and prospecting.	Compliant	No evidence of non compliances with the MOP regarding surface disturbance.	
3 (b)	The MOP must identify the post mining land use and set out a detailed rehabilitation strategy which: (i) identifies areas that will be disturbed; (ii) details the staging of specific mining operations, mining purposes and prospecting; (iii) identifies how the mine will be managed and rehabilitated to achieve the post mining land use; (iv) identifies how mining operations, mining purposes and prospecting will be carried out in order to prevent and or minimise harm to the environment; and (v) reflects the conditions of approval under: •the Environmental Planning and Assessment Act 1979; •the Protection of the Environment Operations Act 1997; and •any other approvals relevant to the development including the conditions of this mining lease.	Compliant	<p>Evidence of three MOPs from the period. Evidence of approval of these MOPs which cover a one year period.</p> <p>Based on site correspondence the MACH Energy the site will complete another 12 month MOP.</p>	
3 (c)	The MOP must be prepared in accordance with the ESG3: Mining Operations Plan (MOP) Guidelines September 2013 published on the Department's website at <a href="http://www.resourcesandenergy.nsw.gov.au/miners-and-explorers/rules-and-forms/pgf/environmental-guidelines">www.resourcesandenergy.nsw.gov.au/miners-and-explorers/rules-and-forms/pgf/environmental-guidelines</a>	Compliant	Both MOP's have been prepared as per the guidelines.	
3 (d)	The lease holder may apply to the Minister to amend an approved MOP at any time.			
3 (e)	It is not a breach of this condition if: (i) the operations which, but for this condition 3(e) would be a breach of condition 3(a), were necessary to comply with a lawful order or direction given under the Environmental Planning and Assessment Act 1979, the Protection of the Environment Operations Act 1997, the Work Health and Safety (Mines and Petroleum Sites) Act 2013 and Work Health and Safety (Mines and Petroleum Sites) Regulation 2014 or the Work Health and Safety Act 2011; and Work Health and Safety Regulation 2011 (ii) the Minister had been notified in writing of the terms of the order or direction prior to the operations constituting the breach being carried out.	Noted		
3 (f)	The lease holder must prepare a Rehabilitation Report to the satisfaction of the Minister. The report must: (i) provide a detailed review of the progress of rehabilitation against the performance measures and criteria established in the approved MOP; (ii) be submitted annually on the grant anniversary date (or at such other times as agreed by the Minister); and (iii) be prepared in accordance with any relevant annual reporting guidelines published on the Department's website at <a href="http://www.resourcesandenergy.nsw.gov.au/miners-and-explorers/rules-and-forms/pgf/environmental-guidelines">www.resourcesandenergy.nsw.gov.au/miners-and-explorers/rules-and-forms/pgf/environmental-guidelines</a>  <i>Note: The Rehabilitation Report replaces the Annual Environmental Management Report.</i>	Compliant	Included in the Annual Review with this provided to the RR.	
<b>4. Non-Compliance Reporting</b>				

# ML 1709 Licence Instrument

Condition Number	Condition	Compliance Status	Evidence	Recommended Action
4 (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;	Not Triggered	According to site communications there were no breaches of any conditions of this mining lease or breaches of the Mining Act or Regulations.	
4 (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.	Not Triggered	No evidence of breaches provided to SLR.	
<b>5. Environmental Incident Report</b>				
	The lease holder must provide environmental incident notifications and reports to the Secretary no later than seven (7) days after those environmental incident notifications and reports are provided to the relevant authorities under the Protection of the Environment Operations Act 1997.	Not Triggered	No evidence of environmental incidents that causes material harm under the POEO Act.	
<b>6. Extraction Plan</b>				
6 (a)	<p>In this condition:</p> <p>(i) approved Extraction Plan means a plan, being:</p> <p>A. an extraction plan or subsidence management plan approved in accordance with the conditions of a relevant development consent and provided to the Secretary; or</p> <p>B. a subsidence management plan relating to the mining operations subject to this lease:</p> <p>I. submitted to the Secretary on or before 31 December 2014; and</p> <p>II. approved by the Secretary.</p> <p>(ii) relevant development consent means a development consent or project approval issued under the Environmental Planning &amp; Assessment Act 1979 relating to the mining operations subject to this lease.</p>	Not Triggered	Open cut mine. Not Applicable.	
6 (b)	The lease holder must not undertake any underground mining operations that may cause subsidence except in accordance with an approved Extraction Plan.	Not Triggered	Open cut mine. Not Applicable.	
6 (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.	Not Triggered	Open cut mine. Not Applicable.	
6 (d)	<p>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> <p>A. built features;</p> <p>B. public safety; or</p> <p>C. subsidence monitoring.</p>	Not Triggered	Open cut mine. Not Applicable.	
<b>7. Resource Recovery</b>				
	The lease holder must optimise recovery of the minerals that are the subject of this mining lease to the extent economically feasible.	Compliant	No reason to determine non compliance.	
<b>8. Group Security</b>				
	<p>The lease holder is required to provide and maintain a security deposit to secure funding for the fulfilment of obligations of all or any kind under the mining lease, including obligations of all or any kind under the mining lease that may arise in the future.</p> <p>The amount of the security deposit to be provided as a group security has been assessed by the Minister at \$17,956,000.</p> <p>The leases covered by the group security include:</p> <p><b>Mining Lease 1645 (Act 1992)</b></p> <p><b>Mining Lease 1708 (Act 1992)</b></p> <p><b>Mining Lease 1709 (Act 1992)</b></p> <p><b>Mining Lease 1713 (Act 1992)</b></p> <p><b>Mining Lease 1750 (Act 1992)</b></p>	Compliant	<p>* Letter from DPIE dated 29/7/2019 approving an increase in the security deposit to \$52,073,000.</p> <p>* "Details of Mining Lease 1645 (Act 1992)" states the securities held by DPIE.</p>	
<b>9. Cooperation Agreement</b>				
	<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>	Not Triggered	Not overlapping with any other MLs.	
<b>Exploration Reporting</b>				

# ML 1709 Licence Instrument

Condition Number	Condition	Compliance Status	Evidence	Recommended Action
Note:	<p><i>Exploration Reports (Geological and Geophysical)</i></p> <p>The lease holder must lodge reports to the satisfaction of the Minister in accordance with section 163C of the Mining Act 1992 and in accordance with clause 59 of the Mining Regulation 2016. Reports must be prepared in accordance with <i>Exploration Reporting: A guide for reporting on exploration and prospecting in New South Wales</i>.</p>	Compliant	Evidence of exploration reports across the period. Most recent report covers 17 December 2018 to 16 December 2019.	
<b>Special Conditions</b>				
Note:	The standard conditions apply to all mining leases. The Division of Resources and Geoscience (DRG) reserves the right to impose special conditions, based on individual circumstances, where appropriate.	Note	Noted	

# ML 1713 Transfer Approval

Condition Number	Condition	Compliance Status	Evidence	Recommended Action
<b>Mining Lease Conditions 2013</b>				
<b>1. Notice to Landholders</b>				
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.	Compliant	Based on site discussions there has been no conditions triggered the lease renewal.	
1 (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.	Compliant	N/A	
<b>2. Rehabilitation</b>				
	Any disturbance resulting from the activities carried out under this mining lease must be rehabilitated to the satisfaction of the Minister.	Compliant	<p>Rehabilitation status reported in the 2017 - 2019 Annual Reviews.</p> <p>According to site communications in August 2019 the Resource Regulator (RR) attended the site and reviewed rehabilitated areas. They were generally satisfied with the rehabilitation.</p> <p>According to site communications no notifications have been issued by RR in regards to improving rehabilitation.</p> <p>Only one notification (NTCE0004145) has been issued by RR, dated 1 November 2019 and this related to a rehabilitation risk assessment. According to site communications a risk assessment has been held and a Draft Mount Pleasant Operations Rehabilitation Risk Assessment Report is being prepared.</p> <p>Evidence of early phase of rehabilitation program during the site inspection. Evidence of some recent reshaping for failed rehabilitation area. Additional reshaping and new rehabilitation proposed for 2020.</p>	
<b>3. Mining Operations Plan and Annual Rehabilitation Report</b>				
3 (a)	The lease holder must comply with an approved Mining Operations Plan (MOP) in carrying out any significant surface disturbing activities, including mining operations, mining purposes and prospecting. The lease holder must apply to the Minister for approval of a MOP. An approved MOP must be in place prior to commencing any significant surface disturbing activities, including mining operations, mining purposes and prospecting.	Compliant	No evidence of non compliances with the MOP regarding surface disturbance.	

# ML 1713 Transfer Approval

Condition Number	Condition	Compliance Status	Evidence	Recommended Action
3 (b)	The MOP must identify the post mining land use and set out a detailed rehabilitation strategy which: (i)identifies areas that will be disturbed; (ii)details the staging of specific mining operations, mining purposes and prospecting; (iii)identifies how the mine will be managed and rehabilitated to achieve the post mining land use; (iv)identifies how mining operations, mining purposes and prospecting will be carried out in order to prevent and or minimise harm to the environment; and (v)reflects the conditions of approval under: •the Environmental Planning and Assessment Act 1979; •the Protection of the Environment Operations Act 1997; and •any other approvals relevant to the development including the conditions of this mining lease.	Compliant	Evidence of three MOPs from the period. Evidence of approval of these MOPs which cover a one year period.  Based on site correspondence the MACH Energy the site will complete another 12 month MOP.	
3 (c)	The MOP must be prepared in accordance with the ESG3: Mining Operations Plan (MOP) Guidelines September 2013 published on the Department's website at <a href="http://www.resourcesandenergy.nsw.gov.au/miners-and-explorers/rules-and-forms/pgf/environmental-guidelines">www.resourcesandenergy.nsw.gov.au/miners-and-explorers/rules-and-forms/pgf/environmental-guidelines</a>	Compliant	Both MOP's have been prepared as per the guidelines.	
3 (d)	The lease holder may apply to the Minister to amend an approved MOP at any time.			
3 (e)	It is not a breach of this condition if: (i)the operations which, but for this condition 3(e) would be a breach of condition 3(a), were necessary to comply with a lawful order or direction given under the Environmental Planning and Assessment Act 1979, the Protection of the Environment Operations Act 1997, the Work Health and Safety (Mines and Petroleum Sites) Act 2013 and Work Health and Safety (Mines and Petroleum Sites) Regulation 2014 or the Work Health and Safety Act 2011; and Work Health and Safety Regulation 2011 (ii)the Minister had been notified in writing of the terms of the order or direction prior to the operations constituting the breach being carried out.	Noted		
3 (f)	The lease holder must prepare a Rehabilitation Report to the satisfaction of the Minister. The report must:  (i)provide a detailed review of the progress of rehabilitation against the performance measures and criteria established in the approved MOP; (ii)be submitted annually on the grant anniversary date (or at such other times as agreed by the Minister); and (iii)be prepared in accordance with any relevant annual reporting guidelines published on the Department's website at <a href="http://www.resourcesandenergy.nsw.gov.au/miners-and-explorers/rules-and-forms/pgf/environmental-guidelines">www.resourcesandenergy.nsw.gov.au/miners-and-explorers/rules-and-forms/pgf/environmental-guidelines</a>	Compliant	Included in the Annual Review with this provided to the RR.	

## 4. Non-Compliance Reporting

# ML 1713 Transfer Approval

Condition Number	Condition	Compliance Status	Evidence	Recommended Action
4 (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;	Not Triggered	According to site communications there were no breaches of any conditions of this mining lease or breaches of the Mining Act or Regulations.	
4 (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.	Not Triggered	No evidence of breaches provided to SLR.	
<b>5. Environmental Incident Report</b>				
	The lease holder must provide environmental incident notifications and reports to the Secretary no later than seven (7) days after those environmental incident notifications and reports are provided to the relevant authorities under the Protection of the Environment Operations Act 1997.	Not Triggered	No evidence of environmental incidents that causes material harm under the POEO Act.	
<b>6. Extraction Plan</b>				
6 (a)	<p>In this condition:</p> <p>(i) approved Extraction Plan means a plan, being:</p> <p>A. an extraction plan or subsidence management plan approved in accordance with the conditions of a relevant development consent and provided to the Secretary; or            B. a subsidence management plan relating to the mining operations subject to this lease:</p> <p>I. submitted to the Secretary on or before 31 December 2014; and</p> <p>II. approved by the Secretary.</p> <p>(ii) relevant development consent means a development consent or project approval issued under the Environmental Planning &amp; Assessment Act 1979 relating to the mining operations subject to this lease.</p>	Not Triggered	Open cut mine. Not Applicable.	
6 (b)	The lease holder must not undertake any underground mining operations that may cause subsidence except in accordance with an approved Extraction Plan.	Not Triggered	Open cut mine. Not Applicable.	
6 (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.	Not Triggered	Open cut mine. Not Applicable.	

# ML 1713 Transfer Approval

Condition Number	Condition	Compliance Status	Evidence	Recommended Action
6 (d)	<p>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> <p>A. built features;</p> <p>B. public safety; or</p> <p>C. subsidence monitoring.</p>	Not Triggered	Open cut mine. Not Applicable.	
<b>7. Resource Recovery</b>				
	<p>The lease holder must optimise recovery of the minerals that are the subject of this mining lease to the extent economically feasible.</p>	Compliant	No reason to determine non compliance.	
<b>8. Group Security</b>				
	<p>The lease holder is required to provide and maintain a security deposit to secure funding for the fulfilment of obligations of all or any kind under the mining lease, including obligations of all or any kind under the mining lease that may arise in the future.</p> <p>The amount of the security deposit to be provided as a group security has been assessed by the Minister at \$17,956,000.</p> <p>The leases covered by the group security include:</p> <p><b>Mining Lease 1645 (Act 1992)</b></p> <p><b>Mining Lease 1708 (Act 1992)</b></p> <p><b>Mining Lease 1709 (Act 1992)</b></p> <p><b>Mining Lease 1713 (Act 1992)</b></p> <p><b>Mining Lease 1750 (Act 1992)</b></p>	Compliant	<p>* Letter from DPIE dated 29/7/2019 approving an increase in the security deposit to \$52,073,000.</p> <p>* "Details of Mining Lease 1645 (Act 1992)" states the securities held by DPIE.</p>	
<b>9. Cooperation Agreement</b>				

# ML 1713 Transfer Approval

Condition Number	Condition	Compliance Status	Evidence	Recommended Action
	<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>	Not Triggered	Not overlapping with any other MLs.	
<b>Exploration Reporting</b>				
Note:	<p><i>Exploration Reports (Geological and Geophysical)</i></p> <p><i>The lease holder must lodge reports to the satisfaction of the Minister in accordance with section 163C of the Mining Act 1992 and in accordance with clause 59 of the Mining Regulation 2016.</i></p> <p><i>Reports must be prepared in accordance with Exploration Reporting: A guide for reporting on exploration and prospecting in New South Wales.</i></p>	Compliant	Evidence of exploration reports across the period. Most recent report covers 17 December 2018 to 16 December 2019.	
<b>Special Conditions</b>				
Note:	<p><i>The standard conditions apply to all mining leases. The Division of Resources and Geoscience (DRG) reserves the right to impose special conditions, based on individual circumstances, where appropriate.</i></p>	Note	Noted	



# ML 1750

Condition Number	Condition	Compliance Status	Evidence	Recommended Action
<b>Mining Lease Conditions 2013</b>				
<b>1. Notice to Landholders</b>				
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.	Compliant	Based on site discussions there has been no conditions triggered the lease renewal.	
1 (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.	Compliant	N/A	
<b>2. Rehabilitation</b>				
	Any disturbance resulting from the activities carried out under this mining lease must be rehabilitated to the satisfaction of the Minister.	Compliant	<p>Rehabilitation status reported in the 2017 - 2019 Annual Reviews.</p> <p>According to site communications in August 2019 the Resource Regulator (RR) attended the site and reviewed rehabilitated areas. They were generally satisfied with the rehabilitation.</p> <p>According to site communications no notifications have been issued by RR in regards to improving rehabilitation.</p> <p>Only one notification (NTCE0004145) has been issued by RR, dated 1 November 2019 and this related to a rehabilitation risk assessment. According to site communications a risk assessment has been held and a Draft Mount Pleasant Operations Rehabilitation Risk Assessment Report is being prepared.</p> <p>Evidence of early phase of rehabilitation program during the site inspection. Evidence of some recent reshaping for failed rehabilitation area. Additional reshaping and new rehabilitation proposed for 2020.</p>	
<b>3. Mining Operations Plan and Annual Rehabilitation Report</b>				
3 (a)	The lease holder must comply with an approved Mining Operations Plan (MOP) in carrying out any significant surface disturbing activities, including mining operations, mining purposes and prospecting. The lease holder must apply to the Minister for approval of a MOP. An approved MOP must be in place prior to commencing any significant surface disturbing activities, including mining operations, mining purposes and prospecting.	Compliant	No evidence of non compliances with the MOP regarding surface disturbance.	
3 (b)	The MOP must identify the post mining land use and set out a detailed rehabilitation strategy which: <ul style="list-style-type: none"> <li>(i) identifies areas that will be disturbed;</li> <li>(ii) details the staging of specific mining operations, mining purposes and prospecting;</li> <li>(iii) identifies how the mine will be managed and rehabilitated to achieve the post mining land use;</li> <li>(iv) identifies how mining operations, mining purposes and prospecting will be carried out in order to prevent and or minimise harm to the environment; and</li> <li>(v) reflects the conditions of approval under: <ul style="list-style-type: none"> <li>• the Environmental Planning and Assessment Act 1979;</li> <li>• the Protection of the Environment Operations Act 1997; and</li> <li>• any other approvals relevant to the development including the conditions of this mining lease.</li> </ul> </li> </ul>	Compliant	<p>Evidence of three MOPs from the period. Evidence of approval of these MOPs which cover a one year period.</p> <p>Based on site correspondence the MACH Energy the site will complete another 12 month MOP.</p>	
3 (c)	The MOP must be prepared in accordance with the ESG3: Mining Operations Plan (MOP) Guidelines September 2013 published on the Department's website at <a href="http://www.resourcesandenergy.nsw.gov.au/miners-and-explorers/rules-and-forms/pgf/environmental-guidelines">www.resourcesandenergy.nsw.gov.au/miners-and-explorers/rules-and-forms/pgf/environmental-guidelines</a>	Compliant	Both MOP's have been prepared as per the guidelines.	
3 (d)	The lease holder may apply to the Minister to amend an approved MOP at any time.			
3 (e)	It is not a breach of this condition if: <ul style="list-style-type: none"> <li>(i) the operations which, but for this condition 3(e) would be a breach of condition 3(a), were necessary to comply with a lawful order or direction given under the Environmental Planning and Assessment Act 1979, the Protection of the Environment Operations Act 1997, the Work Health and Safety (Mines and Petroleum Sites) Act 2013 and Work Health and Safety (Mines and Petroleum Sites) Regulation 2014 or the Work Health and Safety Act 2011; and Work Health and Safety Regulation 2011</li> <li>(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.</li> </ul>	Noted		
3 (f)	The lease holder must prepare a Rehabilitation Report to the satisfaction of the Minister. The report must: <ul style="list-style-type: none"> <li>(i) provide a detailed review of the progress of rehabilitation against the performance measures and criteria established in the approved MOP;</li> <li>(ii) be submitted annually on the grant anniversary date (or at such other times as agreed by the Minister); and</li> <li>(iii) be prepared in accordance with any relevant annual reporting guidelines published on the Department's website at <a href="http://www.resourcesandenergy.nsw.gov.au/miners-and-explorers/rules-and-forms/pgf/environmental-guidelines">www.resourcesandenergy.nsw.gov.au/miners-and-explorers/rules-and-forms/pgf/environmental-guidelines</a></li> </ul> <p><i>Note: The Rehabilitation Report replaces the Annual Environmental Management Report.</i></p>	Compliant	Included in the Annual Review with this provided to the RR.	
<b>4. Non-Compliance Reporting</b>				

# ML 1750


Condition Number	Condition	Compliance Status	Evidence	Recommended Action
4 (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;	Not Triggered	According to site communications there were no breaches of any conditions of this mining lease or breaches of the Mining Act or Regulations.  No evidence of breaches provided to SLR.	
4 (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.	Not Triggered		
<b>5. Environmental Incident Report</b>				
	The lease holder must provide environmental incident notifications and reports to the Secretary no later than seven (7) days after those environmental incident notifications and reports are provided to the relevant authorities under the Protection of the Environment Operations Act 1997.	Not Triggered	No evidence of environmental incidents that causes material harm under the POEO Act.	
<b>6. Extraction Plan</b>				
6 (a)	In this condition: (i) approved Extraction Plan means a plan, being: A. an extraction plan or subsidence management plan approved in accordance with the conditions of a relevant development consent and provided to the Secretary; or B. a subsidence management plan relating to the mining operations subject to this lease: I. submitted to the Secretary on or before 31 December 2014; and II. approved by the Secretary. (ii) relevant development consent means a development consent or project approval issued under the Environmental Planning & Assessment Act 1979 relating to the mining operations subject to this lease.	Not Triggered	Open cut mine. Not Applicable.	
6 (b)	The lease holder must not undertake any underground mining operations that may cause subsidence except in accordance with an approved Extraction Plan.	Not Triggered	Open cut mine. Not Applicable.	
6 (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.	Not Triggered	Open cut mine. Not Applicable.	
6 (d)	The lease holder must notify the Secretary within 48 hours of any: (i) incident caused by subsidence which has a potential to expose any person to health and safety risks; (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 (iii) significant failure or malfunction of a monitoring device or risk control measure set out in the approved Extraction Plan addressing: A. built features; B. public safety; or C. subsidence monitoring.	Not Triggered	Open cut mine. Not Applicable.	
<b>7. Resource Recovery</b>				
	The lease holder must optimise recovery of the minerals that are the subject of this mining lease to the extent economically feasible.	Compliant	No reason to determine non compliance.	
<b>8. Group Security</b>				

# ML 1750

Condition Number	Condition	Compliance Status	Evidence	Recommended Action
	<p>The lease holder is required to provide and maintain a security deposit to secure funding for the fulfilment of obligations of all or any kind under the mining lease, including obligations of all or any kind under the mining lease that may arise in the future.</p> <p>The amount of the security deposit to be provided as a group security has been assessed by the Minister at \$17,956,000.</p> <p>The leases covered by the group security include:</p> <p><b>Mining Lease 1645 (Act 1992)</b></p> <p><b>Mining Lease 1708 (Act 1992)</b></p> <p><b>Mining Lease 1709 (Act 1992)</b></p> <p><b>Mining Lease 1713 (Act 1992)</b></p> <p><b>Mining Lease 1750 (Act 1992)</b></p>	Compliant	<p>* Letter from DPIE dated 29/7/2019 approving an increase in the security deposit to \$52,073,000.</p> <p>* "Details of Mining Lease 1645 (Act 1992)" states the securities held by DPIE.</p>	
<b>9. Cooperation Agreement</b>				
	<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>	Not Triggered	Not overlapping with any other MLs.	
<b>Exploration Reporting</b>				
Note:	<p><i>Exploration Reports (Geological and Geophysical)</i></p> <p>The lease holder must lodge reports to the satisfaction of the Minister in accordance with section 163C of the Mining Act 1992 and in accordance with clause 59 of the Mining Regulation 2016.</p> <p>Reports must be prepared in accordance with <i>Exploration Reporting: A guide for reporting on exploration and prospecting in New South Wales</i>.</p>	Compliant	Evidence of exploration reports across the period. Most recent report covers 17 December 2018 to 16 December 2019.	
<b>Special Conditions</b>				
Note:	The standard conditions apply to all mining leases. The Division of Resources and Geoscience (DRG) reserves the right to impose special conditions, based on individual circumstances, where appropriate.	Note	Noted	

# APPENDIX C

Audit Certification Form

Development Name	Mount Pleasant Operation
Development Consent No.	Development Consent DA 92/97
Description of Development	Open Cut Coal Mine
Development Address	Off Construction Road, Vales Point NSW 2259
Operator	Mach Energy Australia Pty Ltd
Operator Address	PO Box 351 Muswellbrook, NSW
Title of Audit	Mount Pleasant 2020 Independent Environmental Audit
Audit Period	26 November 2017 to 27 February 2020
<p><i>I certify that I have undertaken the independent Audit and prepared the contents of the attached independent Audit report and to the best of my knowledge:</i></p> <p><i>The Audit has been undertaken in accordance with relevant approval condition(s) and in accordance with the Auditing standard AS/NZS ISO 19011:2014 and Post Approval Guidelines – Independent Audits</i></p> <p><i>The findings of the Audit are reported truthfully, accurately and completely;</i></p> <p><i>I have exercised due diligence and professional judgement in conducting the Audit;</i></p> <p><i>I have acted professionally, in an unbiased manner and did not allow undue influence to limit or over-ride objectivity in conducting the Audit;</i></p> <p><i>I am not related to any owner or operator of the development as an employer, business partner, employee, sharing a common employer, having a contractual arrangement outside the Audit, spouse, partner, sibling, parent, or child;</i></p> <p><i>I do not have any pecuniary interest in the Audited development, including where there is a reasonable likelihood or expectation of financial gain or loss to me or to a person to whom I am closely related (i.e. immediate family);</i></p> <p><i>Neither I nor my employer have provided consultancy services for the Audited development that were subject to this Audit except as otherwise declared to the lead regulator prior to the Audit; and</i></p> <p><i>I have not accepted, nor intend to accept any inducement, commission, gift or any other benefit (apart from fair payment) from any owner or operator of the development, their employees or any interested party. I have not knowingly allowed, nor intend to allow my colleagues to do so.</i></p> <p><i>Note.</i></p> <p><i>The Independent Audit is an ‘environmental Audit’ for the purposes of section 122B(2) of the Environmental Planning and Assessment Act 1979. Section 122E provides that a person must not include false or misleading information (or provide information for inclusion in) an Audit report produced to the Minister in connection with an environmental Audit if the person knows that the information is false or misleading in a material respect. The maximum penalty is, in the case of a corporation, \$1 million and for an individual, \$250,000.</i></p> <p><i>The Crimes Act 1900 contains other offences relating to false and misleading information: section 192G (Intention to defraud by false or misleading statement—maximum penalty 5 years imprisonment); sections 307A, 307B and 307C (False or misleading applications/information/documents—maximum penalty 2 years imprisonment or \$22,000, or both).</i></p>	
Signature	
Name of Lead / Principal Auditor	Chris Jones
Address	10 Kings Road, New Lambton NSW 2305, Australia
Email Address	cjones@slrconsulting.com
Audit or Certification (if relevant)	Principal Environmental Auditor
Date:	11 June 2020

# APPENDIX D

Endorsement of SLR



Mr Andrew Reid  
Environmental Superintendent (Operations)  
MACH Energy Australia Pty Ltd  
1100 Wybong Road  
MUSWELLBROOK NSW 2333

Contact: Heidi Watters  
Phone: (02) 6575 3401  
Email: [heidi.watters@planning.nsw.gov.au](mailto:heidi.watters@planning.nsw.gov.au)  
[compliance@planning.nsw.gov.au](mailto:compliance@planning.nsw.gov.au)  
Our ref: DA92/97

Email: [andrew.reid@machenergyaustralia.com.au](mailto:andrew.reid@machenergyaustralia.com.au)

Dear Mr Reid

**MOUNT PLEASANT OPERATION (DA 92/97) – INDEPENDENT ENVIRONMENTAL AUDIT**

Reference is made to correspondence from MACH Energy Australia Pty Ltd (MACH Energy) requesting the Secretary of the Department of Planning, Industry and Environment (the Department) endorsement of a suitably qualified, experienced and independent team of experts, including wastewater management, for the upcoming Independent Environmental Audit (IEA) required by Schedule 5 condition 9 of DA 92/97 (the consent) for the Mount Pleasant Operation.

The Secretary nominee has considered the proposed audit team and subsequently endorses the following audit team:

- Chris Jones – Lead Environmental Auditor and Rehabilitation specialist
- Tracey Ball – Assistant Auditor
- Ali Naghizadeh – Air Quality specialist
- Nathan Archer – Noise, Blast and Vibration specialist

Please ensure this correspondence is appended to the IEA report.

As per Schedule 5 condition 10 of the consent, within 12 weeks of commencing this audit (i.e. from the date of the first day of the site inspection), or as otherwise agreed with the Secretary, the IEA report and the response to audit recommendations (RAR) are to be submitted to the Department.

Please submit the IEA report and RAR via the Major Project website  
(<https://www.planningportal.nsw.gov.au/majorprojects/services/lodge-post-approval-documents-0>)

Should you need to discuss the above, please contact me as per the details provided above.

Yours sincerely,

Heidi Watters  
Team Leader Northern  
Compliance, Planning & Assessments



Mr Andrew Reid  
Superintendent Environment  
Mount Pleasant Operation  
MACH Energy Australia Pty Ltd

By Email Only: [andrew.reid@machenergy.com.au](mailto:andrew.reid@machenergy.com.au)

14 May 2020

Dear Mr Reid

**Mt Pleasant Operation (DA 92/97)  
Extension of Time to 2020 Independent Environmental Audit**

I refer to your request (DA92/97-PA-10) for an extension of time to submit the 2020 Independent Environmental Audit (IEA) and the response to audit recommendations (RAR) as required under the conditions of Development Consent DA 92/97 (the consent) for the Mount Pleasant Operation (MPO).

The Department notes a one-month extension has been requested due to additional auditor site visits and changes to working arrangements due to COVID-19.

Accordingly, the Planning Secretary has granted an extension of time until **18 June 2020** for the IEA and RAR submission to the Department.

If you wish to discuss the matter further, please contact myself on (02) 6575 3401 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



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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>			
S2 C 12	<p>See other conditions for specific recommendations regarding dust.</p> <p>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.</p>	<p>Temporary repairs have been undertaken on the LVMV road.</p> <p>A detailed design to upgrade the road is currently being undertaken.</p>	<p>Complete December 2021</p>
S2 C 5	<p>REC: The monthly reports on the website should continue to report against how the site compared against the cumulative noise criteria.</p> <p>REC: 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; and</li> <li>- compliance against cumulative criteria.</li> </ul> <p>NOTE - these recommendation have been addressed int he 2019 Annual Review and Monthly Reports with this completed following the initial findings during the site inspection.</p>	<p>These recommendations have now been addressed, with information included in 2020 monthly reports and the 2019 Annual Review.</p>	<p>Complete</p>
S2 C 9	<p>REC: 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>The Thiess real time noise monitoring system will be updated to reflect trigger level colours.</p> <p>No update to the Noise Management Plan is required.</p>	<p>September 2020</p>
S2 C 10	<p>REC: Any elevated blasting levels (ie. 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>These recommendations have now been addressed, with information included in 2020 monthly reports as required.</p>	<p>Complete</p>

	REC: Include a cumulative assessment of the percentage of blasts >115dB year to date to ensure <5%		
S2 C 11	<p>REC: 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>REC: 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>	These recommendations have now been addressed, with information included in 2020 monthly reports and 2019 Annual Review.	Complete
S2 C 15	<p>REC: Ensure the Blast Scheduling information is available on the home page by a simple link ie. 'Upcoming Blasting'. It is not obvious to find the blast scheduling information on the current website.</p> <p>REC: Results of blast fume monitoring should be included in monthly reports and the Annual Review</p>	<p>The MACH Energy website now has a 'ticker' on the front page that includes blast notification information.</p> <p>Monthly reports will be updated to include blast fume data, and the 2020 Annual Review will include a summary of blast fume performance.</p>	<p>Complete</p> <p>June 2020</p>
S2 C 22 and 23	Recommend reviewing the way dust is visually assessed with this based on the EPA's new Dust Management Handbook 2019.	<p>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.</p> <p>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.</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 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>	Complete

Increased training in visual dust management at site. This should be regularly discussed and documented in toolbox talks.

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.

Complete

As an action from the audit inspection a toolbox was provided to the OCEs and Supervisors on 26 February 2020 to deliver during the daily pre-start meetings to reinforce the importance of dust management to each of the mining crews, including dust management during excavator loading.

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 (eg. Reduction in speed) or operations are to cease until adequate dust controls are available.

MACH Energy disagrees with the assertion that the haul trucks observed by the auditor were not being operated in a proper manner. All haul trucks were driven in a safe and efficient manner, the site speed limits (set for both safety and dust reduction purposes) were adhered to, and a number of water carts were in operation throughout the site.

Complete

The nature of dust emissions from mine sites is that even with the implementation of best practice emission controls, some dust will be emitted from some activities, and the nature and location of the emissions needs to be considered when prioritising dust controls.

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.

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

	<p>Update the MOP to include a defined timeframe to revegetate soil stockpiles.</p> <p>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>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>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>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 notes 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 1 July 2020 – 30 June 2021 MOP has been updated to include timeframes for topsoil stockpile shaping and seeding and is currently with DPIE for approval.</p> <p>Mount Pleasant Operation has multiple cameras within site, including those that cover the mining area.</p> <p>MACH Energy is currently investigating the installation of additional cameras, and access to existing cameras.</p> <p>Palas Fidas calibration was previously undertaken in January and February 2020. MACH Energy will engage a specialist air quality consultancy to determine if the calibration is required to be updated with seasonal data.</p> <p>MACH Energy did engage a specialist air quality consultancy (Todoroski Air Sciences) to review monitoring data in 2019 to determine if any exceedances occurred that were not due to exceptional events. The outcome of the review informed the preparation of the 2019 Annual Review &amp; Annual Rehabilitation Report.</p> <p>An air quality expert will be engaged for future Annual Reviews to review any exceedances of criteria, and to provide a summary for inclusion in the Annual Review.</p>	<p>1 July 2020</p> <p>March 2021</p> <p>June 2021</p> <p>Complete</p>
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<p>S2 C 26</p>	<p>REC: There are a selection of proposed water management and erosion and sediment upgrades with these outlined in Section 5.4.</p> <p>Issue ID1</p> <p>Engaging an independent specialist to complete an erosion and sediment control/water management audit to identify all the erosion and sediment control/water management issues at site. Develop an action plan for erosion and sediment control/water management.</p> <p>Issue ID2</p> <p>The internal powerline pole that is located within the drainage line near the highwall dam is to be monitored for integrity. Additional erosion and sediment control work is likely required to ensure the power line is not compromised by failure or movement.</p> <p>Issue ID3</p> <p>Review sediment fencing at the site and replace sections as required.</p> <p>Recommend adding a series of haybales or corr logs in the drainage line near the current rehabilitation area as we understand the drainage in that area will change within a year. When constructed as per the Blue Book, haybales or corr logs will be a far more effective erosion and sediment control for channelized flow than sediment fences.</p> <p>Issue ID4</p> <p>Repair larger rill and gully erosion (including Fines Emplacement Area). This includes the area where the culvert in the Mine Water Dam has created a drainage cutting into the Mine Water Dam. Review erosion and sediment control in this area. Consider extending the pipeline closer into the dam to prevent erosion.</p> <p>Develop a strategy to minimise erosion of the dam walls.</p> <p>Issue ID5</p> <p>Include all dams in the Water Management Plan.</p>	<p>MACH Energy will engage a specialist to complete an internal erosion and sediment control audit.</p> <p>Issue ID2 will be reviewed with the internal erosion and sediment control audit to be undertaken. In the interim, it will be regularly monitored to ensure integrity.</p> <p>Sediment fencing will be reviewed with the internal erosion and sediment control audit to be undertaken.</p> <p>Once construction areas are complete and rehabilitated, sediment fencing is removed as part of the Ground Disturbance Permit close out process. This will continue to progress.</p> <p>The area near the current rehabilitation is being monitored and will be remediated with hay bales if required. This area will be reworked, and permanent mine water management systems put in place as part of the MOD4 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>December 2020</p> <p>December 2020</p> <p>December 2020</p> <p>October 2022</p> <p>Complete</p> <p>September 2020</p>
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<p>Issue ID6</p> <p>Complete a review of the impacts of the proposed water allocations on the site based on the water allocation limits. From an environmental management and mining perspective it is important that water for the use of dust management is maintained.</p>	<p>MACH Energy has been involved in the WaterNSW updates and has undertaken extensive modelling on the expected water allocations for 2020-21 water year.</p> <p>MACH Energy has sufficient water resources to run the Mount Pleasant Operation.</p>	<p>Complete</p>
<p>Issue ID7</p> <p>Complete an erosion and sediment control design of the entrance road bund (borrow pit) to reduce the likelihood of erosion and sediment controls issues. Other features such as horizontal ripping or geofabric matting may be required to reduce the likelihood of erosion.</p>	<p>Remediation of the borrow pit area has undergone detailed design and scoping, with works to commence shortly.</p>	<p>December 2020</p>
<p>Issue ID8</p> <p>There is an area where a drainage structure has failed near the MIA/workshop areas. This area flows into the mine water management system and does not go off site. This requires replacement and engineering advice.</p>	<p>Remediation of the MIA drainage structures will be scoped with suitable engineering design and then remediated.</p>	<p>June 2021</p>
<p>Issue ID9</p> <p>The CHPP requires erosion and sediment control review. SLR understand a significant amount of money has been set aside for this work and engineering designs are progressing. This area flows into the mine water management system and does not go off site.</p> <p>Implement the actions of the engineering review.</p> <p>Ensure the designs also include a review of the drains that fall just outside the CHPP area (near the Rejects Road). These are older degraded drainage lines.</p> <p>Note, since the Audit inspection some of these areas have been remediated. However additional work is still required in this area.</p>	<p>There is currently significant engineering design being undertaken to update the mine water management and erosion and sediment control systems at the CHPP and preliminary budgets are approved. Once the review and design are finalised, works will commence.</p> <p>In the interim, temporary works have commenced in the area and include remediation of higher risk areas such as roads, banded areas, drainage pipelines, and ensuring areas within the CHPP and TLO are safe for access.</p>	<p>December 2021</p>
<p>Issue ID10</p> <p>Undertake regular monitoring of the area.</p>	<p>The area downstream of the MPO Construction Offices will be remediated as part of proposed construction works in the area. In the interim, all water flows into the existing MPO mine water management system.</p>	<p>June 2021</p>

	<p>Install temporary erosion and sediment controls to ensure that the area remains stable until the area is re-constructed during MOD 4 works.</p> <p>Issue ID11</p> <p>Undertake regular monitoring of the area.</p> <p>Use a grader to push eroded material back into gullies.</p> <p>It should be noted that evidence of remediation of erosion areas along this roadway was provided since the Audit site inspection.</p> <p>Issue ID12</p> <p>Continue to maintain the light vehicle and medium vehicle road.</p> <p>Completion of seeding in bare areas which form part of the cleanwater catchment. Note, there has been evidence of some tree planting in this area since the Audit site inspection was completed.</p> <p>Review the need for sediment fencing some areas until grass cover is established.</p> <p>Issue ID13</p> <p>Review engineering controls to reduce the likelihood of any tailings spill going into the cleanwater dam. Possible use of sleeve to contain tailings pipeline.</p> <p>Note, evidence provided since the Audit inspection of the installation of end of line burst protection flow meters.</p>	<p>Erosion and sediment control works have been completed in this area, including filling in and strengthening gullied areas.</p> <p>The LVMV road will continue to be maintained.</p> <p>Seeding and/or tree planting within areas requiring remediation will be undertaken as required. A tree planting campaign was undertaken in this area in May 2020.</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> <p>In addition, a review into additional controls will be undertaken for the section of the fines emplacement pipeline that goes over the clean water diversion drain.</p>	<p>Complete</p> <p>Complete</p> <p>Complete</p> <p>December 2020</p>
S2 C 32	<p>REC: Continue to implement additional weed management activities onsite.</p>	<p>MACH Energy has engaged Enright Land Management to undertake weed and pest management at MPO. The scope includes a site weed map and action plan, completed in 2019, and a quarterly weed management program. Quarters 1 and 2 have been completed, with quarters 3 and 4 planned and budgeted.</p>	<p>Complete</p>



S2 C 33	REC: Continue the process of progressing the covenant for the Aboriginal Conservation Area.	MACH Energy is attempting to progress the covenant and is currently awaiting a response from DPIE.	Complete
S2 C 47	REC: 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.	Mount Pleasant Operation has multiple cameras within site, including those that cover the mining area. MACH Energy is currently investigating the installation of additional cameras, including to the east of MPO looking west.	March 2021
S2 C 52	See Section 5.3 of the main report for dust recommendations. For waste as per Schedule 3 Condition 52 of the Development Consent. In - Pit Storage a) & b) Ensure all waste is separated out and stored in the correct waste or recycle bin. c) Ensure all hydrocarbon spills are cleaned up. Workshop Area a) Ensure Remondis label all waste bins. b) Place oil pan under any engines/equipment stored in unbunded areas, that have the potential to drip any hydrocarbons/fluid etc. c) Ensure all chemicals/hydrocarbons are banded.  Construction Offices a) Ensure all waste is separated out and stored in the correct waste or recycle bin. b) Ensure all chemicals/hydrocarbons are banded. c) Ensure all bagged contaminated soil is transported to the land farm.	Waste management will be re-toolboxed as required following regular environmental inspections. Areas of waste storage have been tidied up, including cleaning up of spills.  Remondis have updated bin labels as required. Waste management will be re-toolboxed as required following regular environmental inspections. Areas of waste storage have been tidied up, including cleaning up of spills. Bunding is being reviewed and will be updated as required for storage areas.  Waste management was re-toolboxed to teams and will be re-toolboxed as required following regular environmental inspections.  Bunding is being reviewed and will be updated as required for storage areas. Waste was removed.	Complete  Complete  September 2020 Complete  Complete  December 2020  Complete  December 2020  Complete
S2 C 54	REC: 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.	Rehabilitation areas requiring improvement, as outlined in the recommendation, have been remediated.	Complete

	<p>REC: Some seeding should be completed in the area above ED2 which is showing signs of erosion.</p> <p>REC: 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>REC: Update the relevant document (MOP/RMP or Rehabilitation Strategy) to ensure there are no inconsistencies with the documents.</p>	<p>Remediation works are currently being undertaken within this area, including remediation of the access road and areas surrounding water monitoring infrastructure. Areas will be seeded as required.</p> <p>The MPO MOP has been updated to include defined timeframes to shape and seed topsoil stockpiles. The updated MOP is currently with the DPIE for approval and will be available on the MACH Energy website once approved.</p> <p>The Rehabilitation Strategy shows an overarching conceptual plan for rehabilitation at MPO, whereas the MOP provides detail and is updated on a more regular basis. As such, there are some inconsistencies between the two. These inconsistencies will be addressed when each of the plans are updated.</p>	<p>December 2020</p> <p>Complete</p> <p>July 2021</p>
S5 C 2	<p>REC: 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>Management plans will be updated as per the recommendation in a staged approach, at the time when each management plan requires update.</p>	<p>December 2021</p>
S5 C 3	<p>As per Schedule 3 Condition 5 recommendation.</p> <p>REC: 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; and</li> <li>- compliance against cumulative criteria.</li> </ul> <p>As per Schedule 3 Condition 22 and 23 recommendation.</p>	<p>The 2020 Annual Review will include a summary of noise performance.</p>	<p>March 2021</p>

	REC: 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.	An air quality expert will be engaged for future Annual Reviews to review any exceedances of criteria, and to provide a summary for inclusion in the Annual Review.	March 2021
S5 C 4	REC: Update wording in the Annual Review to outline which management plans require updating and which management plans do not require updating.	The 2020 Annual Review will include this information.	March 2021
<b>Environmental Protection Licence EPL 20850</b>			
L 2.1	As per recommendation from Schedule 3 Condition 5 of the Development Consent. REC: The monthly reports on the website should report against how the site compared against the cumulative noise criteria. REC: It is recommended that an appendix is prepared to the Annual Review that summarises noise performance including: - date of monitoring; - compliance against NAG's noise criteria, including a table/tables that summarises actual noise levels during monitoring events; and - compliance against cumulative criteria. NOTE - these recommendation have been addressed in the 2020 Annual Review and Monthly Reports	These recommendations have now been addressed, with information included in 2020 monthly reports and the 2019 Annual Review.	Complete
L 3.1	REC: Blast fume performance should be reported in the Annual Review and EPL monthly reports	Monthly reports will be updated to include blast fume data, and the 2020 Annual Review will include a summary of blast fume performance.	June 2020
L 3.2	As per Schedule 3 Condition 11. REC: The time of the blasts for overpressure and vibration is not recorded in the Annual Review. To be included in future Annual Reviews. NOTE - this has been addressed in the 2019 Annual Review REC: 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.	These recommendations have now been addressed, with information included in 2020 monthly reports and the 2019 Annual Review.	Complete

L 3.3	REC: Any elevated blasting levels (ie. Above 120 dBL) should be discussed in the monthly environmental reports and appropriate action detailed.	These recommendations have now been addressed, with information included in 2020 monthly reports as required.	Complete
L 3.4	REC: Any elevated blasting levels (ie. Above 115 dBA) 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. REC: Include a cumulative assessment of the percentage of blasts >115dB year to date to ensure <5%	These recommendations have now been addressed, with information included in 2020 monthly reports as required.	Complete
O 1.1	See Section 5.3 of the main report for dust recommendations. For waste as per Schedule 3 Condition 52 of the Development Consent. In - Pit Storage a) & b) Ensure all waste is separated out and stored in the correct waste or recycle bin. c) Ensure all hydrocarbon spills are cleaned up. Workshop Area a) Ensure Remondis label all waste bins. b) Place oil pan under any engines/equipment stored in unbunded areas, that have the potential to drip any hydrocarbons/fluid etc. c) Ensure all chemicals/hydrocarbons are banded. Construction Offices a) Ensure all waste is separated out and stored in the correct waste or recycle bin. b) Ensure all chemicals/hydrocarbons are banded. c) Ensure all bagged contaminated soil is transported to the land farm.	Waste management will be re-toolboxed as required following regular environmental inspections. Areas of waste storage have been tidied up, including cleaning up of spills.  Remondis have updated bin labels as required. Waste management will be re-toolboxed as required following regular environmental inspections. Areas of waste storage have been tidied up, including cleaning up of spills. Bunding is being reviewed and will be updated as required for storage areas.  Waste management was re-toolboxed to teams and will be re-toolboxed as required following regular environmental inspections.  Bunding is being reviewed and will be updated as required for storage areas. Waste was removed.	Complete  Complete  September 2020 Complete  Complete  December 2020  Complete  December 2020  Complete
O 3.1 – O 3.4	As per recommendations from Schedule 3 Condition 22 and 23 of the Development Consent.		

Recommend reviewing the way dust is visually assessed with this based on the EPAs new Dust Management Handbook 2019.

Increased training in visual dust management at site. This should be regularly discussed and documented in toolbox talks.

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 (eg. Reduction in speed) or operations are to cease until adequate dust controls are available.

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.

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.

Further, no real time dust alarms were triggered at the time of the observations.

Notwithstanding, the environmental team called for water carts to attend the pit area in question.

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.

As an action from the audit inspection a toolbox was provided to the OCEs and Supervisors on 26 February 2020 to deliver during the daily pre-start meetings to reinforce the importance of dust management to each of the mining crews, including dust management during excavator loading.

MACH Energy disagrees with the assertion that the haul trucks observed by the auditor were not being operated in a proper manner. All haul trucks were driven in a safe and efficient manner, the site speed limits (set for both safety and dust

Complete

Complete

Complete

Update the MOP to include a defined timeframe to revegetate soil stockpiles.

reduction purposes) were adhered to, and a number of water carts were in operation throughout the site.

The nature of dust emissions from mine sites is that even with the implementation of best practice emission controls, some dust will be emitted from some activities, and the nature and location of the emissions needs to be considered when prioritising dust controls.

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.

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.

Further, no real time dust alarms were triggered at the time of the observations.

Notwithstanding, the environmental team called for water carts to attend the pit area in question.

MACH Energy notes that during the observation, water carts continued to operate in areas considered more likely to lead to offsite impacts.

In addition, changes in operations, including reduction in speed and reducing or ceasing operations, occurs as required during periods of elevated air quality levels or dust emissions.

The 1 July 2020 – 30 June 2021 MOP has been updated to include timeframes for topsoil stockpile shaping and seeding and is currently with DPIE for approval.

1 July 2020

	<p>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>It is recommended that the ambient air quality monitoring be undertaken in accordance with the Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales using a laboratory that is NATA accredited for the methods. If use of an approved method for the monitoring of ambient particulate levels is not possible, it is recommended that calibration of PM10 and PM2.5 be undertaken against a reference method (such as a TEOM) initially on a quarterly basis using a NATA accredited laboratory (noting that Carbon Based Environmental whose TEOM monitoring is the basis for the current calibration factors is not an accredited laboratory). If after 4 quarters of calibrations it is determined that no change to the calibration factor is required, then the frequency of calibration against the reference method could be reduced to 1 event per annum.</p> <p>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.</p>	<p>Mount Pleasant Operation has multiple cameras within site, including those that cover the mining area.</p> <p>MACH Energy is currently investigating the installation of additional cameras, and access to existing cameras.</p> <p>MACH Energy disagrees with the assertion that a NATA accredited laboratory would be required for a calibration – laboratories are typically required when a sample must be analysed (e.g. filter paper from a High-Volume Air Sampler [HVAS] weighed, or material collected in a dust deposition gauge characterised). In this instance the calibration is completed by co locating two monitors that measure ambient particulate matter levels continuously through light scattering methods (Palas Fidas) and oscillating microbalance methods (TEOM) and comparing the data. As these monitors measure particulate matter continuously (without collecting samples to be analysed later), a laboratory is not required.</p> <p>Palas Fidas calibration was previously undertaken in January and February 2020. MACH Energy will engage a specialist air quality consultancy to determine if the calibration is required to be updated with seasonal data.</p> <p>MACH Energy did engage a specialist air quality consultancy (Todoroski Air Sciences) to review monitoring data in 2019 to determine if any exceedances occurred that were not due to exceptional events. The outcome of the review informed the preparation of the 2019 Annual Review &amp; Annual Rehabilitation Report.</p> <p>An air quality expert will be engaged for future Annual Reviews to review any exceedances of criteria, and to provide a summary for inclusion in the Annual Review.</p>	<p>March 2021</p> <p>Complete</p> <p>June 2021</p> <p>Complete</p>
O 3.6	As per recommendations from Schedule 3 Condition 23 of the Development Consent.	MACH Energy acknowledges that on one occasion (24 October 2019), all dust generating activities were not shutdown within the timeframe specified by Condition O3.6, and due to a miscommunication issue, four haul trucks continued their operations for a short period of time.	Complete

		<p>Due to the nature of the event (i.e. only a small number of equipment items continued to operate past the allowed timeframe, and no elevated dust levels were recorded during the event), no environmental harm is considered to have occurred as a result of the event.</p> <p>As an outcome of the event, site procedures were amended to minimise the potential for such an event to reoccur. MACH Energy self-reported this event to the EPA and an official caution was received in response from the EPA.</p>	
M 3.1	<p>As per specific recommendation from Schedule 3 Condition 22.</p> <p>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>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>Palas Fidas calibration was previously undertaken in January and February 2020. MACH Energy will engage a specialist air quality consultancy to determine if the calibration is required to be updated with seasonal data.</p> <p>MACH Energy did engage a specialist air quality consultancy (Todoroski Air Sciences) to review monitoring data in 2019 to determine if any exceedances occurred that were not due to exceptional events. The outcome of the review informed the preparation of the 2019 Annual Review &amp; Annual Rehabilitation Report.</p> <p>An air quality expert will be engaged for future Annual Reviews to review any exceedances of criteria, and to provide a summary for inclusion in the Annual Review.</p>	<p>June 2021</p> <p>Complete</p>