

MOUNT PLEASANT OPERATION ENVIRONMENTAL MANAGEMENT STRATEGY

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1 INTRODUCTION

The Mount Pleasant Operation (MPO) is located in the Upper Hunter Valley of New South Wales (NSW), approximately 3 kilometres (km) north-west of Muswellbrook and approximately 50 km north west of Singleton (Figure 1). The village of Aberdeen and locality of Kayuga are also located approximately 5 km north-northeast and 1 km north of the MPO boundary, respectively (Figure 1). MACH Energy purchased the MPO from Coal & Allied Operations Pty Ltd (Coal & Allied) in 2016.

MACH Mount Pleasant Operations Pty Ltd is the manager of the MPO as agent for, and on behalf of, the unincorporated Mount Pleasant Joint Venture between MACH Energy Australia Pty Ltd (MACH Energy) (95 per cent [%] owner) and J.C.D. Australia Pty Ltd (5% owner). This Environmental Management Strategy (EMS) is implemented at the MPO by MACH Energy.

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 (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. 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.

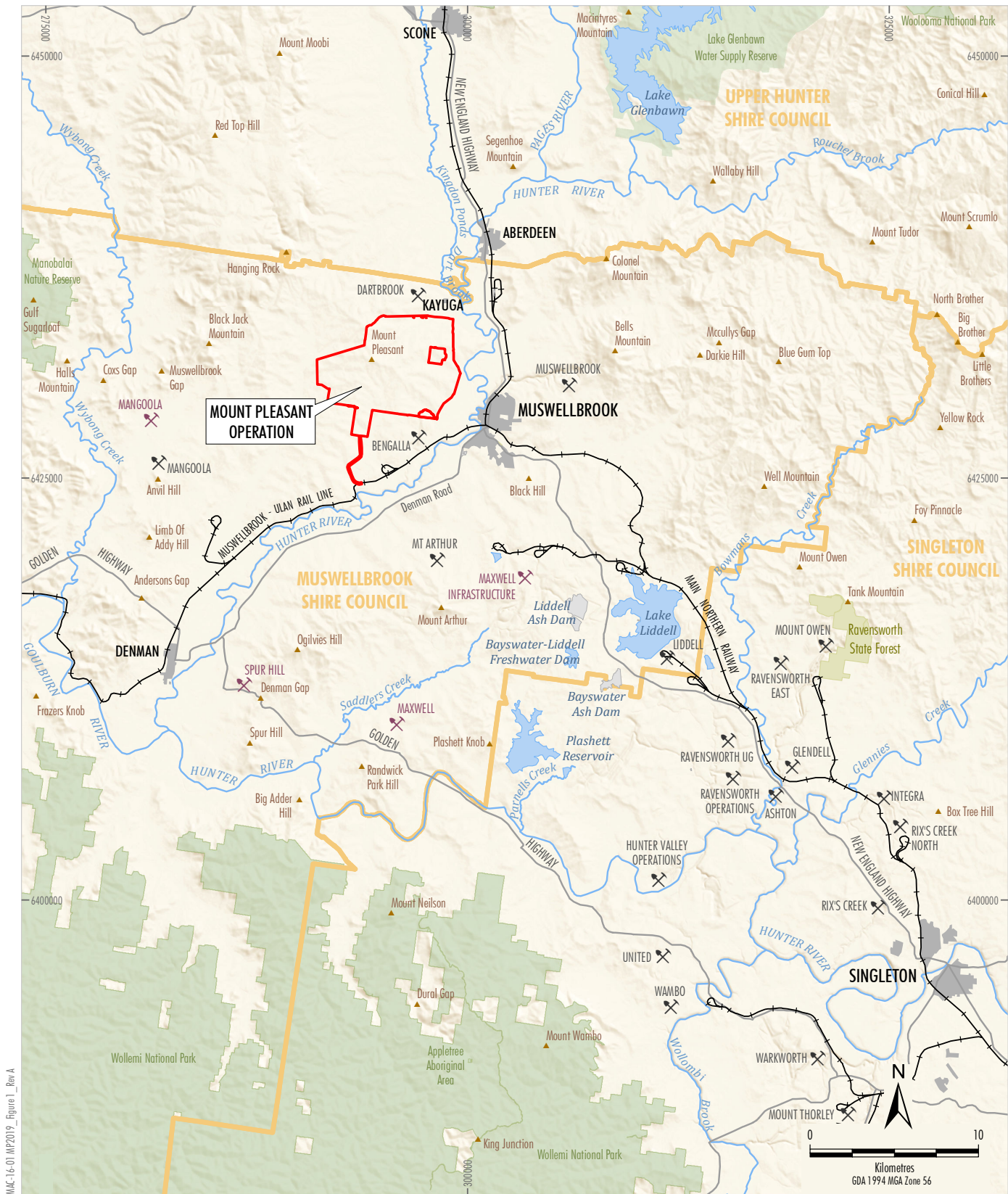
The Mount Pleasant Project Modification (MOD 1) was submitted on 19 May 2010 with a supporting Environmental Assessment (EA) prepared by EMGA Mitchell McLennan (EMGA Mitchell McLennan, 2010). MOD 1 included the provision of an infrastructure envelope for siting the mine infrastructure, the provision 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 on 30 January 2017 with a supporting EA prepared by MACH Energy (MACH Energy, 2017a). MOD 2 proposed to realign an internal haul road to enable more efficient access to the South Pit open cut, with no other material changes to the approved MPO. MOD 2 was approved on 29 March 2017.

The MPO Mine Optimisation Modification (MOD 3) was submitted on 31 May 2017 with a supporting EA prepared by MACH Energy (MACH Energy, 2017b). 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 with a supporting EA prepared by MACH Energy (MACH Energy, 2017c). 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 the redundant approved infrastructure within the extent of the Bengalla Mine, once the new rail, product loading and water supply infrastructure has been commissioned and is fully operational.



MMC-16-01-MP2019_Figure 1_Rev A



Source: © NSW Department of Finance, Services and Innovation (2018); Office of Environment and Heritage NSW (2018)

MACHEnergy
MOUNT PLEASANT OPERATION
Project Location

Figure 1

MOD 4 was approved on 16 November 2018 by the Secretary of the Department of Planning and Environment (under Delegation). 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 (Appendix D) incorporating the MOD 4 infrastructure relocations.

1.1 SITE CONTACTS

The relevant site contacts for the MPO are provided in Table 1.

Table 1
Site Contacts

Position	Contact Name – At January 2020*
General Manager Operations	Richard Bailey
Environmental Superintendent	Andrew Reid
Project Director	Brad Fackender
External Relations Manager	Ngaire Baker
Community Hotline / Contact Number	1800 886 889

* Personnel and/or contact numbers may change over time.

1.2 PREVIOUS VERSIONS

A previous version of the EMS was submitted by Coal & Allied and approved on 23 July 2012. The previous EMS covered a number of Coal & Allied's operations in the Hunter Valley.

A revised version of the EMS was submitted by MACH Energy in response to a request from Department of Planning and Environment (now Department of Planning, Industry and Environment [DPIE]) received 10 July 2017, and was approved on 18 September 2017.

The previously approved version of the EMS was prepared to reflect the approval of MOD 3/MOD 4, and was approved on 14 January 2019.

1.3 CURRENT VERSION

This version of the EMS has been prepared to update the MPO environmental monitoring locations to reflect the approval of site-wide Environmental Management Plans (updated following the approval of MOD 4), and to update the complaints management procedure. This version of the EMS replaces the previously approved version of the EMS described in Section 1.2.

2 PURPOSE AND SCOPE

The EMS has been prepared by MACH Energy to satisfy the requirements of Condition 1, Schedule 5 under Development Consent DA 92/97.

The objectives of the EMS are to fulfil the relevant conditions in Development Consent DA 92/97 by providing a strategic framework for environmental management of the MPO including all environmental management plans (EMPs), strategies and programs prepared for the MPO. The EMS establishes the overarching framework for the monitoring and environmental management of activities undertaken at the MPO. The EMS incorporates the principles of continuous improvement and is consistent with the five pillars of ISO 14001: Environmental Management Systems, represented on Figure 2.

The key EMPs, strategies and programs required at the MPO are:

- EMS;
- Noise Management Plan (NMP);
- Blast Management Plan (BMP);
- Air Quality and Greenhouse Gas Management Plan (AQGGMP);
- Water Management Plan (WMP), incorporating: Site Water Balance (SWB), Erosion and Sediment Control Plan (ESCP), Surface Water Management Plan (SWMP), Groundwater Management Plan (GWMP) and Surface and Ground Water Response Plan (SGWRP);
- Biodiversity Management Plan (BioMP);
- Aboriginal Heritage Management Plan (AHMP);
- Aboriginal Heritage Conservation Strategy;
- Visual Impact Management Plan (VIMP);
- Waste Management Plan (WasteMP);
- Rehabilitation Strategy; and
- Rehabilitation Management Plan (RMP).

An overview of the interaction of the plans required under Development Consent DA 92/97 and other relevant licences and leases is illustrated on Figure 3.

The EMS has been prepared to assist those undertaking the works on-site to apply appropriate environmental management measures. Where there is any conflict between the provisions of the EMS and the contractual obligations of any mining contractor, the contractor shall first request clarification from MACH Energy prior to implementing that element of the EMS over which the ambiguity is identified. In the case of any real or perceived ambiguity between elements of the EMS and statutory requirements, the statutory requirements are to take precedence.

All works (including construction, operations and maintenance) and other related activities (e.g. monitoring and biodiversity offset activities) consistent with Development Consent DA 92/97 are covered by the EMS. The EMS does not cover exploration activities outside of the Schedule of Land in Appendix 1 of Development Consent DA 92/97 and Mining Lease (ML) boundaries. Such exploration is subject to separate regulatory requirements.

The EMS is a public document providing information for operations personnel, contractors, and community and government stakeholders. The document is available on the MACH Energy website (<http://www.machenergyaustralia.com.au>).

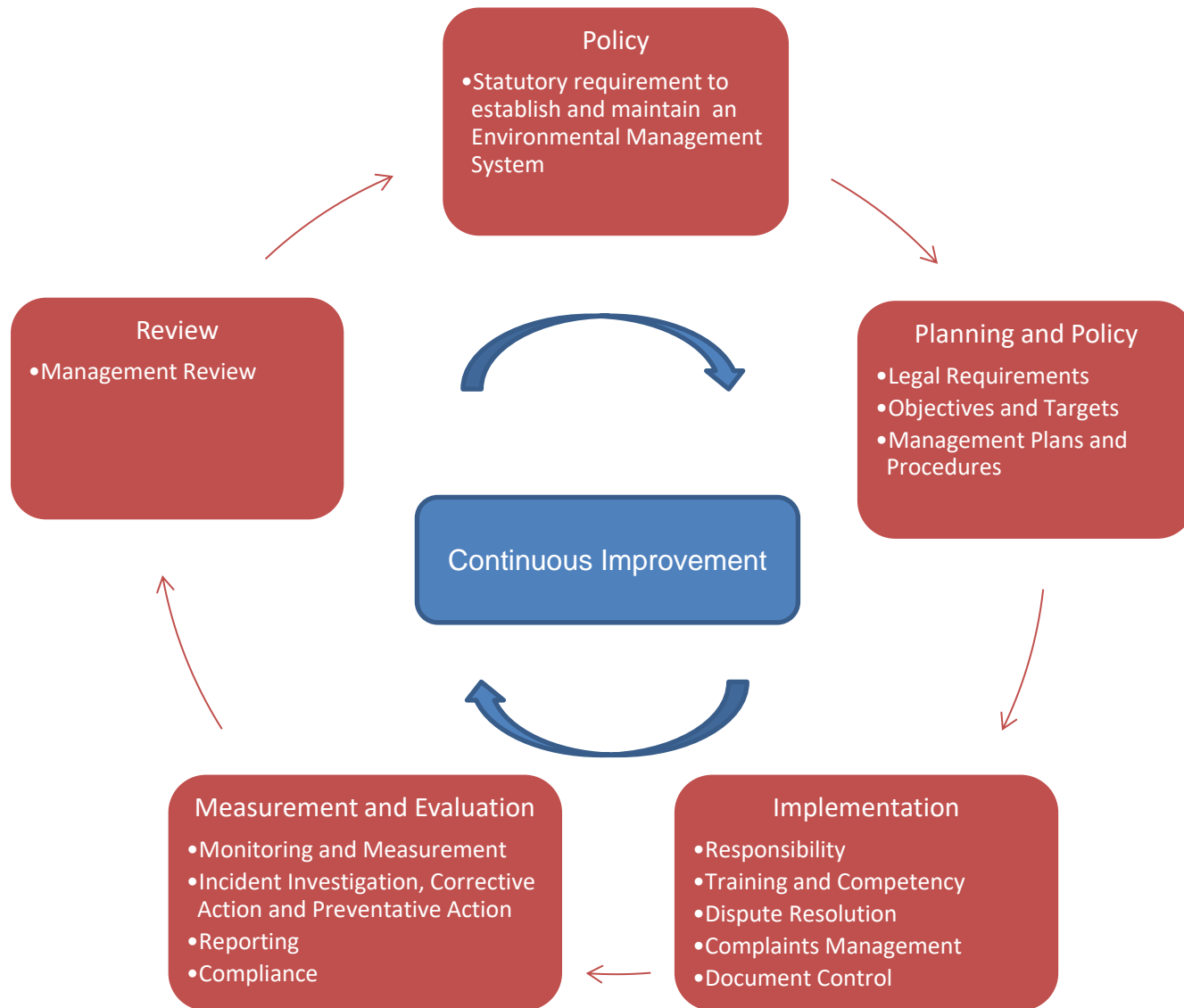
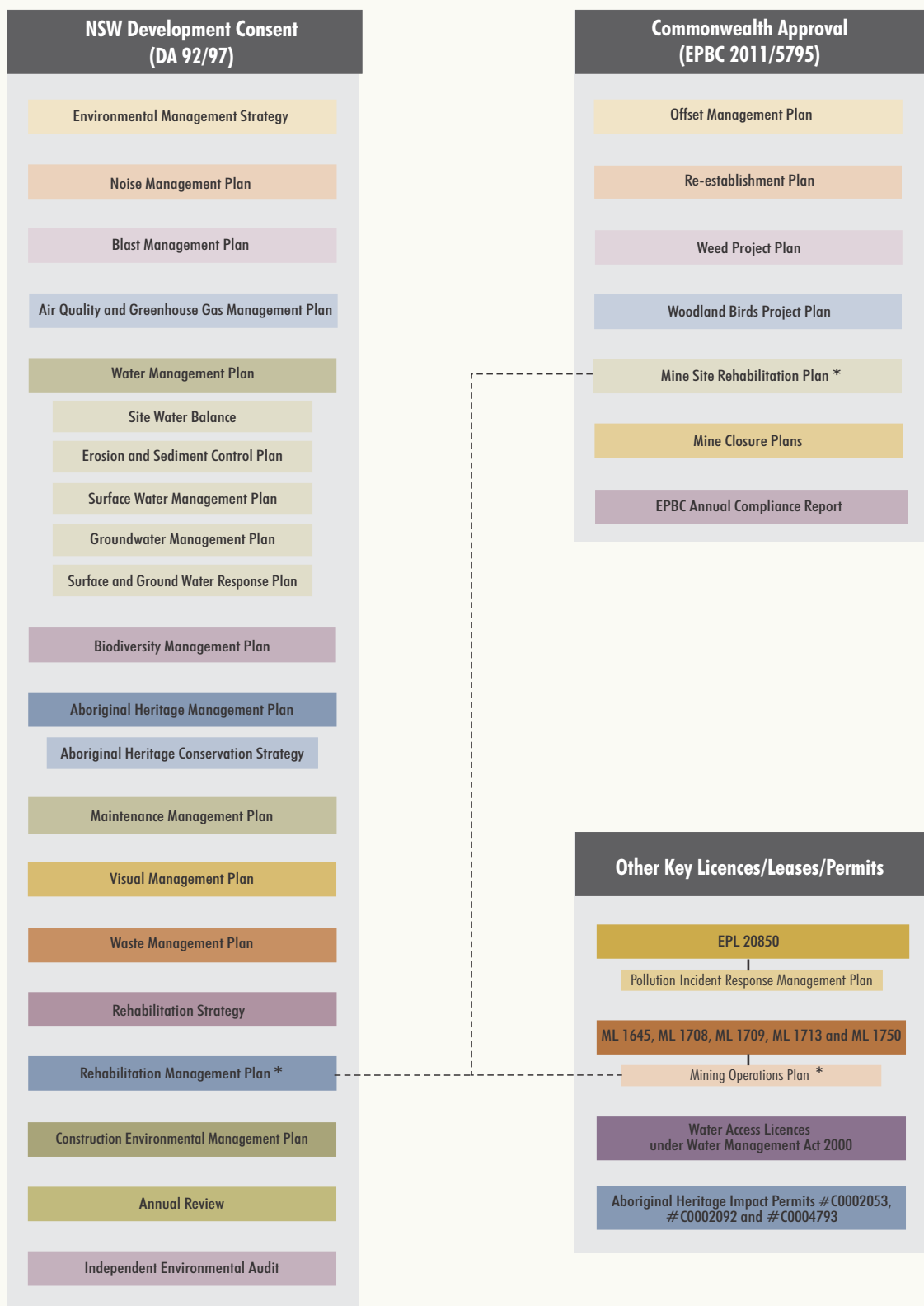


Figure 2: MACH Energy Environmental Management Principles



Notes:

- * The Mining Operations Plan has been developed to meet the requirements for a Rehabilitation Management Plan (Condition 56, Schedule 3 of Development Consent [DA 92/97]). Following approval of the Mine Site Rehabilitation Plan (Conditions 19 and 20 of EPBC 2011/5795), the Mining Operations Plan and Rehabilitation Management Plan would be reviewed and revised if necessary.

Figure 3

3 COMMITMENT AND LEADERSHIP

Environmental management is an integral part of MACH Energy. Achieving effective environmental and community management requires responsible and proactive leadership. MACH Energy's Environmental Policy (ENV Policy) provides the governing principles for environmental and community management. The ENV Policy is provided in Appendix A.

Managers at the MPO will demonstrate commitment by:

- implementing the principles outlined in the ENV Policy;
- endorsing and implementing the EMS;
- making personnel aware of their responsibilities in relation to the policy;
- ensuring the ENV Policy is readily accessible and is displayed in prominent locations; and
- appropriately resourcing implementation and review of the EMS.

Management at the MPO must demonstrate visible and proactive leadership through their commitment to achieving the EMS objectives and goals of the ENV Policy.

The prevention and management of the potential and actual impacts from MPO activities will be achieved through:

- taking a systematic approach;
- taking preventive action in preference to reactive correction;
- proactive attention to environmental issues by all people in the organisation; and
- innovative changes to the way MACH Energy works in order to continually improve its environmental performance.

This EMS has been approved by the MACH Energy management team.

4 PLANNING AND POLICY

MACH Energy's statutory obligations are contained in:

- the conditions of Development Consent DA 92/97;
- the conditions of Commonwealth Approval EPBC 2011/5795;
- relevant licences (including Environment Protection Licence [EPL] 20850), permits and MLs (ML 1645, ML 1708, ML 1709, ML 1713 and ML 1750); and
- other relevant legislation.

Obligations relevant to this EMS are described in Sections 4.1 to 4.4.

4.1 DEVELOPMENT CONSENT DA 92/97

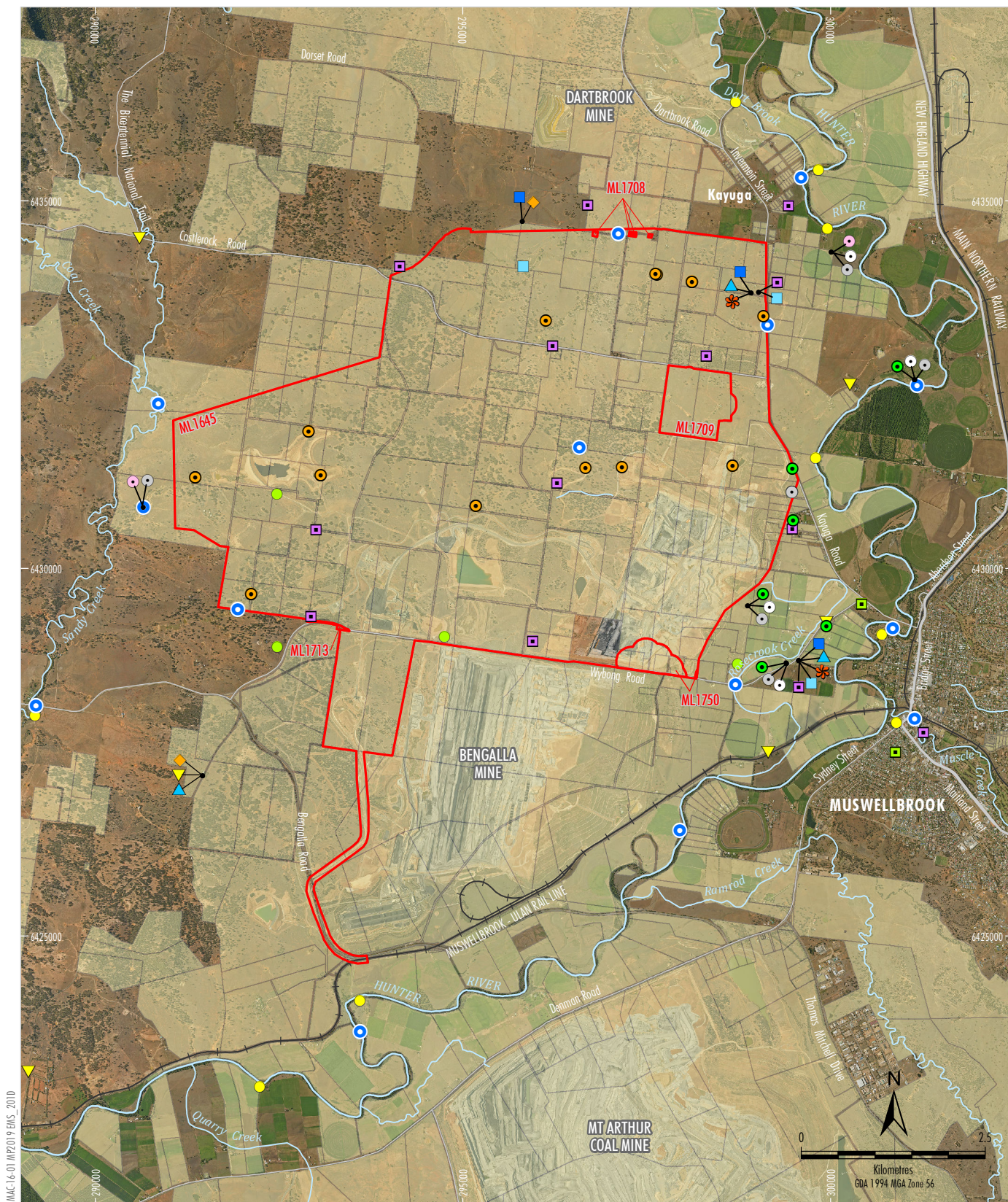
This EMS provides a strategic overview of environmental management at the MPO, and has been prepared by MACH Energy in compliance with the requirements of Condition 1, Schedule 5 of Development Consent DA 92/97.

Table 2 presents these requirements and indicates where they are addressed within this EMS.

Table 2
Specific Development Consent Conditions

Condition 1, Schedule 5	Section
1. If the Secretary requires, the Applicant must prepare an Environmental Management Strategy for the development to the satisfaction of the Secretary. This strategy must:	This document.
(a) be submitted to the Secretary for approval prior to carrying out any development on site;	
(b) provide the strategic framework for environmental management of the development;	Sections 3 and 4
(c) identify the statutory approvals that apply to the development;	Section 4
(d) describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the development;	Section 5.1 and Appendix B
(e) describe the procedures that would be implemented to:	
• keep the local community and relevant agencies informed about the operation and environmental performance of the development;	Section 5.3
• receive, handle, respond to, and record complaints;	Section 5.4
• resolve any disputes that may arise during the course of the development;	Section 5.5
• respond to any non-compliance;	Section 6.2
• respond to emergencies; and	Section 5.2
(f) include:	
• copies of any strategies, plans and programs approved under the conditions of this consent; and	Refer to EMPs (Appendix C)
• a clear plan depicting all the monitoring to be carried out in relation to the development.	Figure 4

Note: MACH Energy received written direction from the Secretary's nominee (dated 10 July 2017) to prepare the EMS by 31 July 2017.



MAC-16-01 MP2019 EAS - 2010

- LEGEND**
- Mining Lease Boundary
 - Mine Owned Land
 - Environmental Monitoring Sites
 - Standpipe
 - Standpipe - Alluvium
 - Planned Standpipe - Coal Seam
 - Planned Standpipe - Interburden
 - Planned Standpipe - Alluvium
 - Surface Water Monitoring Site
 - Stream Health Monitoring Site
 - ▼ Attended Noise
 - ▲ Real-time Noise Monitoring Site
 - Blasting (Vibration/Overpressure)
 - ◆ Weather Mast
 - ✱ Weather Station
 - Air Quality - High Volume Sampler
 - Air Quality - Palas Fidas
 - Dust Deposition Gauge
 - Upper Hunter Air Quality Monitoring Network

Source: MACH Energy (2019); NSW Spatial Services (2019)
Orthophoto: MACH Energy (Jan 2020)

MACHEnergy
MOUNT PLEASANT OPERATION
Indicative Environmental
Monitoring Locations

Figure 4

4.2 COMMONWEALTH GOVERNMENT APPROVALS

The Commonwealth Approval relevant to the MPO is EPBC 2011/5795 granted 29 February 2012 (and variations dated 21 February 2013, 22 May 2014, 18 June 2015, 12 May 2016, 22 February 2017, 1 June 2018, and 28 November 2019).

4.3 LICENCES, PERMITS AND LEASES

In addition to Development Consent DA 92/97 and Commonwealth Approval EPBC 2011/5795, activities at the MPO are conducted in accordance with a number of licences, permits and leases which have been issued or are pending issue.

Key licences, permits and leases pertaining to the MPO include:

- ML 1645, ML 1708, ML 1709, ML 1713 and ML 1750 issued under Part 5 of the *NSW Mining Act, 1992*.
- Various Water Access Licences issued under the *NSW Water Management Act, 2000*.
- Discharge credits held under the *NSW Protection of the Environment Operations (Hunter River Salinity Trading Scheme) Regulation, 2002*.
- EPL 20850 issued under Part 3 of the *NSW Protection of the Environment Operations Act, 1997* by the NSW Environment Protection Authority (EPA).
- Mining Operations Plan (MOP), as required by ML conditions issued under the *NSW Mining Act, 1992* and approved by the Division of Resources and Energy (within DPIE).

ML 1645, ML 1708, ML 1709, ML 1713 and ML 1750 do not contain any conditions requiring the preparation of the EMS. Notwithstanding, they do contain conditions relevant to environmental management and reporting at the MPO.

4.4 OTHER LEGISLATION

Other legislation that may be applicable to the MPO includes, but is not limited to, the:

- *Biodiversity Conservation Act, 2016*;
- *Coal Mine Subsidence Compensation Act, 2017*;
- *Crown Land Management Act, 2016*;
- *Fisheries Management Act, 1994*;
- *Heritage Act, 1977*;
- *Mining Act, 1992*;
- *National Parks and Wildlife Act, 1974*;
- *Protection of the Environment Operations Act, 1997*;
- *Roads Act, 1993*;
- *Water Management Act, 2000*;
- *Work Health and Safety Act, 2011*; and
- *Work Health and Safety (Mines) Act, 2013*.

5 IMPLEMENTATION – MOUNT PLEASANT OPERATION ENVIRONMENTAL MANAGEMENT STRUCTURE

An overview of the environmental management structure at the MPO is provided on Figure 3.

5.1 ROLES AND RESPONSIBILITIES

A combination of MACH Energy employees and mining contractor staff are responsible for environmental management at the MPO. The roles and responsibilities of members of the site, including the environmental management team, are provided in Appendix B.

All employees and contractors working at the MPO are accountable for:

- complying with relevant legislation;
- complying with the EMS;
- communicating any information they become aware of in relation to environmental management; and
- taking actions to prevent and mitigate environmental impacts.

Accountabilities for environmental management are defined in the EMS to ensure personnel and contractors at the MPO are aware of their roles and responsibilities.

5.2 ENVIRONMENTAL EMERGENCIES

MACH Energy maintains a Pollution Incident Response Management Plan (PIRMP) that relates to its operations. The PIRMP outlines the process for responding to environmental emergencies in a timely and effective manner and adopting appropriate measures for the control and recovery from emergencies. Where appropriate, environmental emergency response procedures will be integrated with on-site emergency response plans.

An Emergency Response Team will coordinate and respond to emergency situations and accidents, and undertake rescues as required. Preparedness for emergencies by staff, personnel, contractors and service providers will be undertaken in accordance with on-site training requirements whereby personnel will be appropriately trained in the use of emergency response equipment and procedures, and will be made aware of their responsibilities should such an event occur.

Reporting of incidents will be undertaken in accordance with the protocol outlined in Section 6.3.

5.3 INFORMATION DISSEMINATION

Community Consultative Committee

In accordance with Condition 6, Schedule 5 of Development Consent DA 92/97, a Community Consultative Committee (CCC) has been established. The CCC will be operated in general accordance with the Community Consultative Committee Guidelines for State Significant Developments (Department of Planning and Environment, 2016)¹.

In accordance with Condition 6, Schedule 5 of Development Consent DA 92/97, the membership of the CCC will continue to be comprised of an independent chair and appropriate representation from MACH Energy, affected councils, recognised environmental groups and the general community. The CCC will meet at least twice a year.

In accordance with Condition 11, Schedule 5 of Development Consent DA 92/97, a copy of the minutes of the CCC meetings will be made available on the MACH Energy website.

MACH Energy Australia Website

In accordance with Condition 11, Schedule 5 of Development Consent DA 92/97, the MACH Energy website will be maintained as a tool for the provision of information to stakeholders and interested parties about the operation and environmental performance of the MPO. The following information will be available on the MACH Energy website:

- the EIS (1997), MOD 1 EA, MOD 2 EA, MOD 3 EA, MOD 4 EA and Project layout plans;
- all current statutory approvals for the development;
- approved strategies, plans or programs required under the conditions of Development Consent DA 92/97;
- a 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 Development Consent DA 92/97;
- a complaints register, which is updated on a monthly basis;
- minutes of CCC meetings;
- the annual reviews (over the last 5 years);
- any independent environmental audit, and MACH Energy's response to the recommendations in any audit; and
- any other matter required by the Secretary of the DPIE.

Information available on the MACH Energy website will be updated as required by Development Consent DA 92/97.

Internal Communication

Environmental management documentation developed and retained by MACH Energy will be filed in accordance with the document register and made available to relevant MACH Energy employees and mining contractor staff.

¹ Department of Planning and Environment (2016) *Community Consultative Committee Guidelines State Significant Projects*.

Environmental management and performance will be communicated to staff, contractors and visitors through:

- toolbox training, formal training, memos, weekly/daily planning meetings;
- induction and orientation processes;
- incident or near miss communications;
- site inspections and auditing; and
- communication sessions.

5.4 COMPLAINTS MANAGEMENT

MACH Energy maintains a Community Hotline that is dedicated to the receipt of community complaints, enquiries or information. The Community Hotline is publicly advertised in local newspapers, radio advertising and a variety of MACH Energy's public communication tools, including the MACH Energy website. The Community Hotline is available during all operating hours (i.e. 24 hours a day, seven days a week) to receive any complaints or enquiries from neighbouring residents or other stakeholders.

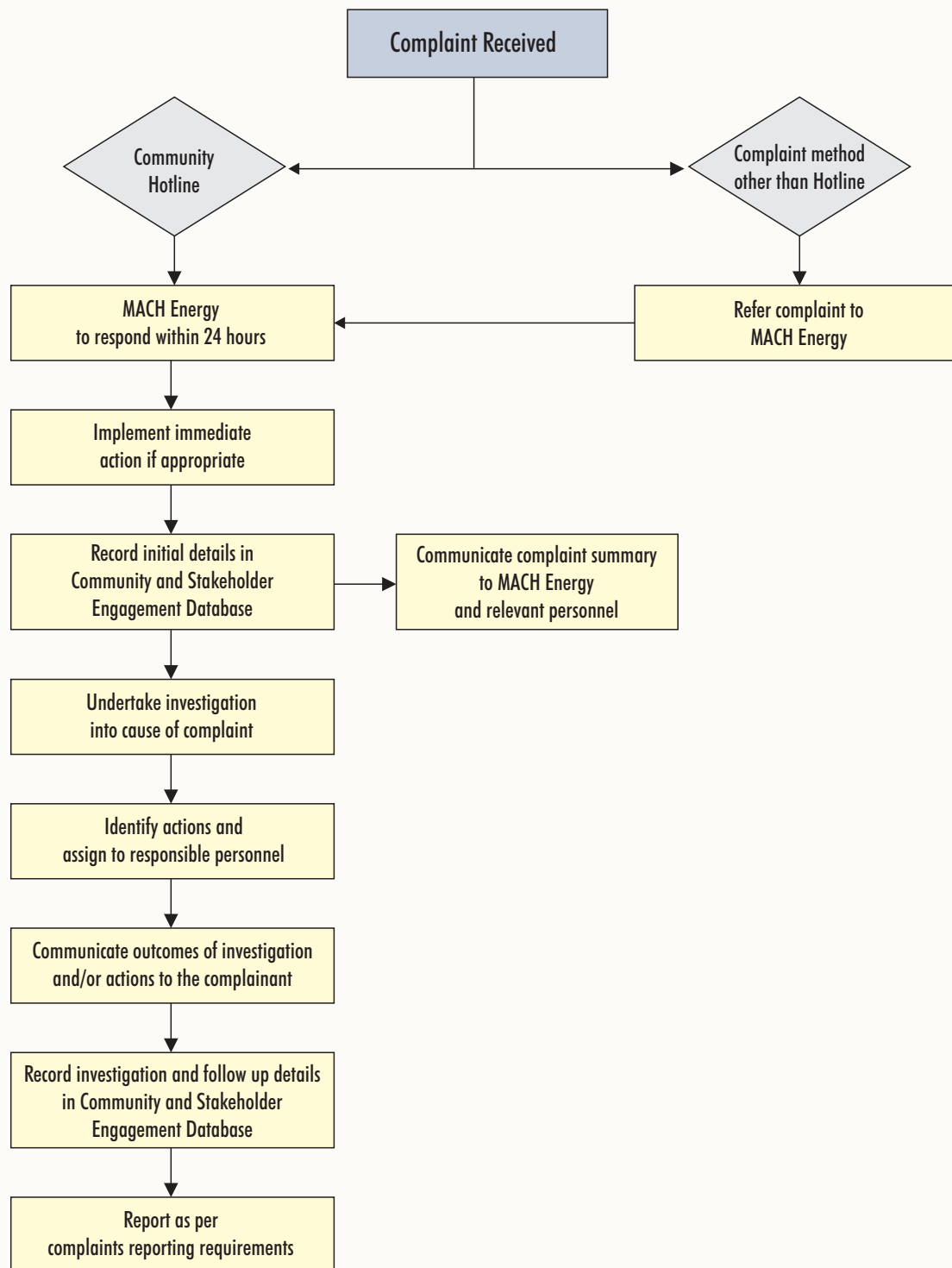
MACH Energy has developed a procedure that outlines its commitment to receiving, responding to and maintaining a record of phone calls from the community. This procedure is supported by a Community and Stakeholder Engagement Register.

The following details are recorded in the Community and Stakeholder Engagement Register:

- the date and time of the contact;
- the method by which engagement was made;
- any personal details provided or, if no such details were provided, a note to that effect;
- the nature of the contact;
- relevant monitoring results and meteorological data at the time of the contact;
- the actions taken by MACH Energy in relation to the contact, including any follow-up that is required with the person contacting the MPO; and
- if no action was taken by MACH Energy, the reasons why no action was taken.

In the event of a complaint, investigations commence within 24 hours of contact (including contact with the complainant) to ensure the likely cause of the complaint is determined (e.g. considering meteorological conditions and nature of mining activities) and, where possible and/or required, mitigating actions are executed. This investigation is used to develop appropriate mitigation measures which are presented to the party who contacted the MPO. Consideration is also given to how adjustments to existing management/operational approaches could be applied across the MPO. MACH Energy provides a response to the complainant within seven calendar days.

An overview of the community complaint response process is detailed in Figure 5. In accordance with Condition 11, Schedule 5 of Development Consent DA 92/97, the Community and Stakeholder Engagement Register is updated monthly and made available on the MACH Energy website. Complaints are also reported in the Annual Review.



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Figure 5

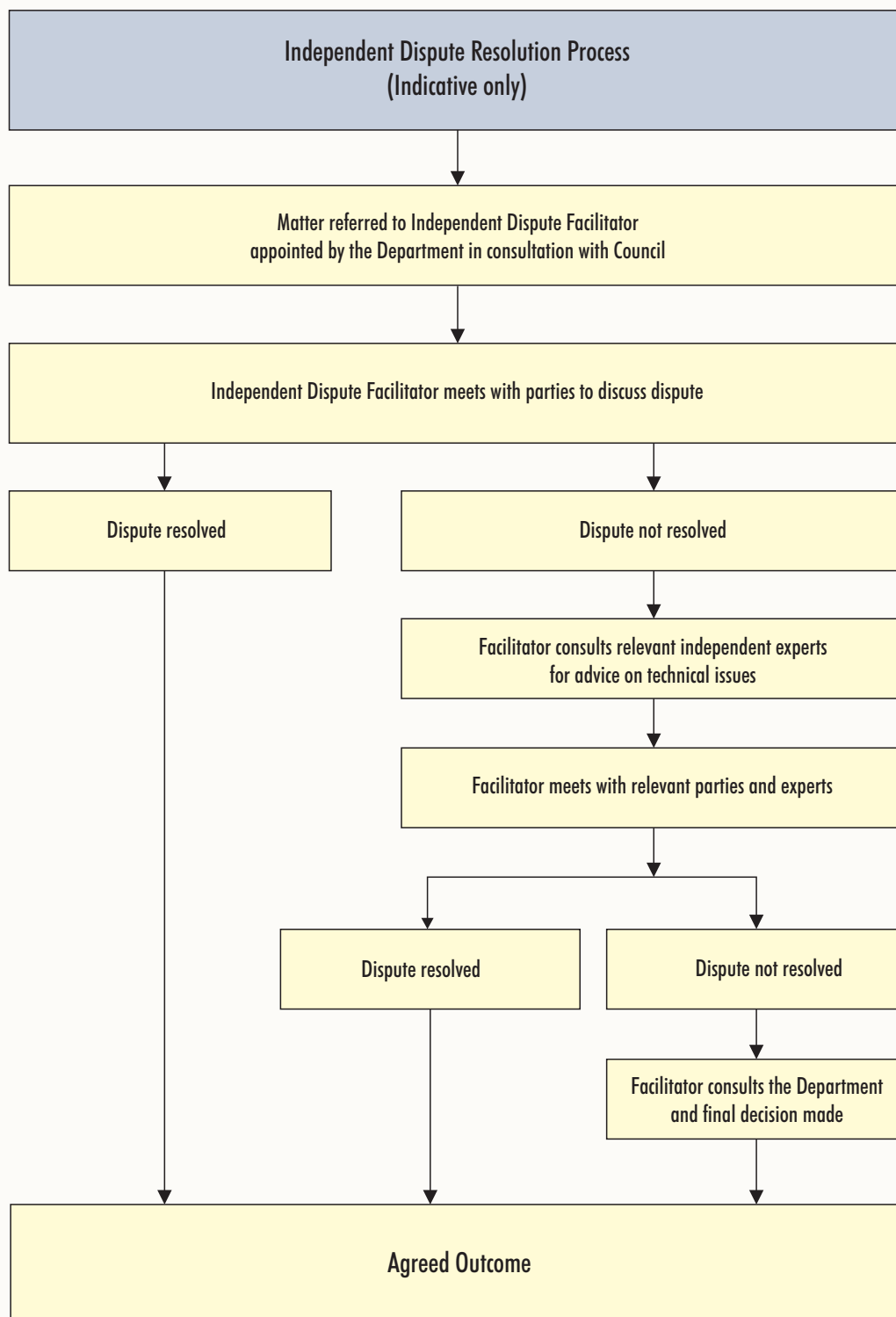
5.5 DISPUTE RESOLUTION

In the event of a disagreement between MACH Energy and a member of the community, MACH Energy will undertake the necessary liaison to reach a resolution. Should resolution of the dispute not be reached through this primary process, either party may refer the matter to the Secretary of the DPIE for resolution.

In accordance with Development Consent DA 92/97, the dispute resolution process will be conducted using the Independent Dispute Resolution Process (Figure 6).

The Secretary of the DPIE, where required, can provide conflict resolution in the following situations:

- Upon receiving a written request from the owner of any residence on the land listed in Table 1 or Table 2 of Conditions 1 and 2, Schedule 3 of Development Consent DA 92/97, MACH Energy is required to implement additional noise and/or dust mitigation measures (such as double-glazing, insulation, air filters, first flush roof water drainage system and/or air conditioning) at the residence in consultation with the landowner. If within three months of receiving this request from the owner, MACH Energy 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.
- In accordance with Condition 13, Schedule 3 of Development Consent DA 92/97, if MACH Energy receives a written request from the owner of any privately-owned land within 2 km 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 two months of receiving this request, MACH Energy shall commission a suitably qualified, experienced and independent person to undertake a property inspection. The property inspection will be conducted in order to establish the baseline condition of the buildings and/or structures on the land and to identify any measures that should be implemented to minimise the potential blasting impacts of the development on these buildings or structures. If there is a dispute over the selection of the suitably qualified, experienced and independent person, or MACH Energy or the landowner disagrees with the findings of the property inspection report, either party may refer the matter to the Secretary for resolution.
- In accordance with Condition 14, Schedule 3 of Development Consent DA 92/97, 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 two months of receiving this claim, MACH Energy is required to commission a suitably qualified, experienced and independent person to investigate the claim, and to provide a copy of the property investigation report to the landowner. If there is a dispute over the selection of the suitably qualified, experienced and independent person, or MACH Energy or the landowner disagrees with the findings of the property inspection report, either party may refer the matter to the Secretary for resolution.
- In accordance with Condition 27, Schedule 3 of Development Consent DA 92/97, MACH Energy is required to provide a long-term compensatory water supply as soon as practicable after the loss is identified to any landowner of privately-owned land whose water entitlements are adversely and directed impacted (other than an impact that is negligible) as a result of the MPO, in consultation with the DPIE – Water, and to the satisfaction of the Secretary of the DPIE. If MACH Energy 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.
- In accordance with Condition 39, Schedule 3 of Development Consent DA 92/97, and if required, MACH Energy shall undertake construction works to the satisfaction of Muswellbrook Shire Council and/or Transport for NSW (TfNSW). If there is any dispute between MACH Energy and Muswellbrook Shire Council or the TfNSW in relation to the funding or upgrade works, then any of the parties may refer the matter to the Secretary for resolution.



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Figure 6

- In accordance with Condition 41A, Schedule 3 of Development Consent DA 92/97, MACH Energy shall contribute to the upgrade and maintenance of Thomas Mitchell Drive and contributions shall be paid to Muswellbrook Shire Council in accordance with the payment schedule in the Contributions Study for the upgrade works and the maintenance schedule during the life of the development. If there is a dispute between the relevant parties about the implementation of Condition 41A, then any party may refer the matter to the Secretary for resolution.
- In accordance with Condition 46, Schedule 3 of Development Consent DA 92/97, 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, MACH Energy shall 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 three months of receiving this request from the owner, MACH Energy and the owner cannot agree on the measures to be implemented, or there is a dispute about the implementation of the measures, then either party may refer the matter to the Secretary for resolution².
- The provision for independent review (Condition 3, Schedule 4 of Development Consent DA 92/97) offers dispute resolution. If an owner of privately-owned land considers the development to be exceeding the relevant criteria in Schedule 3 of Development Consent DA 92/97, then he/she may ask the Secretary in writing for an independent review of the impacts of the development on his/her land.
- In accordance with Condition 6, Schedule 4 of Development Consent DA 92/97, within three months of receiving a written request from a landowner with acquisition rights, MACH Energy shall make a binding written offer to the landowner. However, if at the end of this period, MACH Energy and the 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.

5.6 TRAINING

It is the responsibility of MACH Energy to employ people that are appropriately trained, competent and have an appropriate level of experience and understanding to undertake their work in a manner that minimises impacts on the environment and community. In addition, a component of the site-specific induction is to promote and provide all employees and contractors with general environmental awareness training. In accordance with Condition 16, Schedule 2 of Development Consent DA 92/97, MACH Energy will ensure that any of its employees or contractors are made aware of, and are instructed to comply with, the conditions of Development Consent DA 92/97 relevant to activities they carry out in respect of the development.

A register of training records and competencies is maintained and kept up to date in a MPO Training Register.

Visitors Induction

Visitors to the MPO undergo a visitor's induction, which outlines the overarching environmental, health and safety requirements. The nominated MACH Energy contact is responsible for the actions and conduct of their visitors and will reinforce the MPO environmental requirements.

At all times, visitors are to be accompanied by the nominated MACH Energy contact unless specific direction is provided and the visitor is restricted from performing certain work duties on-site.

² Except in exceptional circumstances, the Secretary will not require additional visual impact mitigation to be undertaken for residences that are more than three kilometres from the mining operations.

Site Induction

Prior to commencing any work duties on-site, all personnel undergo a site-specific induction. The site-specific induction includes a detailed summary of the MPO as well as associated health, safety, environment and community requirements.

Task Specific Training

Occasions may arise where employees or contractors are required to undertake training in specific environmental management duties (i.e. use of air quality monitoring equipment, or use of real-time response protocols). A training needs analysis will identify where these instances occur.

5.7 DOCUMENT CONTROL

All MACH Energy documentation will follow a standard document template, including:

- identification of document need;
- assigning author, unique identifier and header/footer requirements;
- document approval; and
- document review.

5.8 RECORDS MANAGEMENT

A copy of any document that includes data or records is kept and maintained by MACH Energy to demonstrate compliance with relevant legislation, leases, licences, approvals, and any other document that governs operations at the MPO. The Environmental Superintendent is responsible for the management of any necessary environmental records.

6 MEASUREMENT AND EVALUATION

A list of EMPs required at the MPO is provided in Section 2. These plans are reviewed, and if necessary, revised within 3 months of the submission of an Annual Review, incident report, independent audit or any modification to the Project Approvals, in accordance with Condition 4, Schedule 5 of Development Consent DA 92/97.

Monitoring for all parameters nominated in Development Consent DA 92/97 and Commonwealth Approval EPBC 2011/5795 are comprehensively addressed within the EMPs developed to successfully manage each key issue identified.

The Annual Review and the MOP support these plans.

In addition, Condition 9, Schedule 5 of Development Consent DA 92/97 requires MACH Energy to commission, commence and pay the full cost of an Independent Environmental Audit by the end of March 2014, and every three years thereafter. In January 2014, Coal & Allied Operations Pty Ltd requested that Condition 9, Schedule 5 of Development Consent DA 92/97 be amended on the basis that the mine was not yet operating. In January 2014, the Department of Planning and Infrastructure (now DPIE) approved the request, on the terms that:

- A one-on-one compliance review be undertaken by the end of March 2014.
- Further one-on-one reviews be undertaken every three years from March 2014 whilst construction works for the mine are yet to commence.
- Should construction commence, then a full Independent Environmental Audit will be undertaken within 12 months of the date of commencement and every 3 years thereafter, as described in Condition 9, Schedule 5. This timing was subsequently modified, as described in the paragraph below.

In accordance with the conditions provided by the Department of Planning and Environment on 7 July 2017, MACH Energy commissioned and commenced an Independent Environmental Audit for the period 1 January 2014 to 25 November 2017 (inclusive) and submitted a copy of the audit report to the Secretary on 18 May 2018.

Required EMPs, strategies and programs are summarised in Table 3 and the requirements of individual EMPs necessary under Development Consent DA 92/97 are detailed in Appendix D. The Environmental Superintendent is responsible for implementation of all EMPs in Table 3.

6.1 REPORTING

In accordance with Condition 2, Schedule 5 of Development Consent DA 92/97, MACH Energy has developed protocols for managing and reporting the following:

- incidents;
- complaints;
- non-compliances with statutory requirements; and
- exceedances of the impact assessment criteria and/or performance criteria.

Table 3
Summary of Required Environmental Management Strategies, Plans and Programs

Plan	EMP Framework
Environmental Management Strategy*	<ul style="list-style-type: none"> The objective of this document is to outline the strategic framework for environmental management at the MPO.
Noise Management Plan*	<ul style="list-style-type: none"> Identification of relevant criteria, monitoring locations, monitoring frequency and operating conditions. Describes the measures that would be implemented to ensure compliance, including a real-time noise management system that employs both reactive and proactive mitigation measures. Includes a noise monitoring program and a protocol for managing cumulative noise impacts.
Blast Management Plan*	<ul style="list-style-type: none"> Identification of relevant blasting and vibration criteria, monitoring methods and program, protection of infrastructure, property inspections, stakeholder consultation, reporting. Describes the measures that would be implemented to ensure compliance. Includes a road closure management plan, blast monitoring program and a protocol for managing cumulative blasting impacts.
Air Quality and Greenhouse Gas Management Plan*	<ul style="list-style-type: none"> Identification of relevant criteria, monitoring methods and program. Describes the measures that would be implemented to ensure compliance, including a real-time air quality management system that employs both reactive and proactive mitigation measures. Describes the methods to evaluate compliance against criteria, operating conditions, effectiveness of the system and defines protocol for identification of incidents and notification of relevant parties of their occurrence. Includes an air quality monitoring program and a protocol for managing cumulative air quality impacts.
Water Management Plan*	<ul style="list-style-type: none"> Includes a site water balance, erosion and sediment control plan, surface water management plan, groundwater management plan and a surface and groundwater response plan. Outlines the performance criteria for compliance with water management performance measures.
Biodiversity Management Plan*	<ul style="list-style-type: none"> Identification of relevant criteria, monitoring methods and program. Includes a description of the short, medium and long term measures to be implemented, a detailed description of measures to be implemented over the next 3 years and a program to monitor and report on the effectiveness of these measures. Describes the potential risks to successful revegetation and the contingency measures that will be implemented to mitigate these risks.
Aboriginal Heritage Management Plan*	<ul style="list-style-type: none"> Describes the measures that would be implemented for management and protection of known and unknown heritage items, access arrangements to heritage items and ongoing consultation with stakeholders. Includes a detailed plan for implementation of the approved Aboriginal Heritage Conservation Strategy.
Aboriginal Heritage Conservation Strategy*	<ul style="list-style-type: none"> Provides for the establishment, management and conservation of an 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.

Table 3 (continued)
Summary of Required Environmental Management Strategies, Plans and Programs

Plan	EMP Framework
Maintenance Management Plan*	<ul style="list-style-type: none"> Describes maintenance works for the roads and intersections between the Bengalla Mine main entrance and the MPO main entrance.
Visual Impact Management Plan*	<ul style="list-style-type: none"> Provides for the establishment of trees and shrubs and/or the construction of mounding or bunding. Includes details of the visual appearance of buildings, structures, facilities or works, aimed at blending with the surrounding landscape. Includes details of the measures to minimise the visual impacts of the MOD 4 rail infrastructure.
Waste Management Plan*	<ul style="list-style-type: none"> Describes the measures that would be implemented to avoid, minimise, reuse and recycle all waste streams. Includes a fines emplacement plan and a program to evaluate the fines emplacement plan and methods.
Rehabilitation Strategy*	<ul style="list-style-type: none"> Builds upon the rehabilitation objectives defined by Development Consent DA 92/97 and the conceptual final landform. Includes details of the species to be established in rehabilitation areas. Includes an indicative schedule for the staged rehabilitation of the MPO.
Rehabilitation Management Plan*	<ul style="list-style-type: none"> Describes how the rehabilitation of the site would achieve the rehabilitation objectives in Development Consent DA 92/97. Includes a detailed plan for reinstatement and review of the proposed agricultural land capability of grassland areas in the final landform and rehabilitated woodland and fauna habitat areas. Includes detailed performance and completion criteria for evaluating the performance of the rehabilitation of the site. Describes the rehabilitation measures to address all aspects of rehabilitation. Includes procedures for the interim stabilisation and temporary vegetation strategies. Includes detailed scheduling for progressive rehabilitation to be initiated.
Construction Environmental Management Plan*	<ul style="list-style-type: none"> Describes measures to be implemented to minimise MOD 4 construction related noise, vibration, dust, biodiversity and visual impacts. Describes notification and reporting systems related to MOD 4 construction works. Includes a Construction Traffic Management Plan, a Historic Heritage Management Plan and Unexpected Contamination Protocol.
Pollution Incident Response Management Plan [#]	<ul style="list-style-type: none"> Outlines the reporting, management and communication to the general community of pollution incidents.

* Requirement of Development Consent DA 92/97.

[#] Requirement of the NSW *Protection of the Environment Operations Act, 1997*.

Environmental reporting requirements including timing, submission and distribution method are summarised in Table 4. In accordance with Condition 8, Schedule 5 of Development Consent DA 92/97, MACH Energy will provide regular reporting on the environmental performance of the MPO on the MACH Energy website.

In accordance with Condition 7B, Schedule 5 of Development Consent DA 92/97, any conditions of Development Consent DA 92/97 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 NSW *Environmental Planning and Assessment Act, 1979*. These conditions include incident notification (Condition 7, Schedule 5); non-compliance notification (Condition 7A, Schedule 5); reporting and response; compliance reporting; and Independent Environmental Audit (Condition 9, Schedule 5).

6.2 COMPLIANCE

Compliance at the MPO is to be achieved via:

- adherence to Development Consent DA 92/97, EPBC Approval 2011/5795, licence and ML conditions, and corporate policies;
- annual compliance reporting in the Annual Review;
- review of the EMPs within three months of an Annual Review, a reported incident, an Independent Environmental Audit or modifications to the conditions of the current approval;
- compliance auditing (both internal and external);
- identification of performance against objectives and targets; and
- implementation of corrective procedures/strategies following complaint or monitoring inspection and identification and approval from necessary authorities and stakeholders.

A protocol for the managing and reporting of non-compliances with statutory requirements has been developed as a component of the EMS and is described below.

Compliance with all approvals, plans and procedures is the responsibility of all personnel (staff and contractors) employed on or in association with the MPO.

The Environmental Superintendent undertakes regular inspections, internal audits and initiates directions identifying any remediation/rectification work required, and areas of actual or potential non-compliance.

As described in Section 6.3, MACH Energy will notify the Secretary of the DPIE and any other relevant agencies of any incident associated with the MPO that causes or threatens to cause material harm to the environment that is not trivial immediately after MACH Energy becomes aware of the incident. In accordance with Condition 7A, Schedule 3 of Development Consent DA 92/97, within seven days of becoming aware of a non-compliance, MACH Energy will notify DPIE in writing of the non-compliance. The notification will be made to compliance@planning.nsw.gov.au and include:

- identification of the MPO (including the Development Application number and name);
- the condition of Development Consent DA 92/97 that the development is non-compliant with and 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.

Table 4
Mount Pleasant Operation Reporting Requirements

Report	Frequency	Distribution	Distribution Method	Responsibility for Data Collection and Preparation	Responsibility for Submission
Incident Report	As required – see Section 6.3	DPIE Other relevant agencies	Email	Environmental Superintendent	General Manager Operations
Annual Review (incorporating Annual Environmental Management Report)	Annually (by the end of March each year)	DPIE	Email and/or DPIE Portal and website	Environmental Superintendent	General Manager Operations
Hunter River Salinity Trading Scheme Annual Report ¹	Annually ¹	EPA	Email and/or DPIE Portal and website	Environmental Superintendent	General Manager Operations
National Pollutant Inventory Report	Annually (for the period 1 July to 30 June)	DAWE	Email and/or DPIE Portal	Environmental Superintendent	General Manager Operations
National Greenhouse and Energy Report	Annually (for the period 1 July to 30 June)	DAWE	Website	Environmental Superintendent	General Manager Operations
Annual Return	Annually (for the period 1 January to 31 December)	EPA	Email and/or DPIE Portal	Environmental Superintendent	General Manager Operations
EPBC Act Compliance Report	Annually (within three months of the anniversary of the date of commencement) ²	DAWE	Email and/or DPIE Portal and website	Environmental Superintendent	General Manager Operations

DAWE – Commonwealth Department of Agriculture, Water and the Environment, EPA – NSW Environment Protection Authority.

¹ Reporting to be in accordance with EPL 20850.

² MACH Energy substantially commenced the MPO on 25 November 2016.

In addition, within two weeks of obtaining monitoring results showing an exceedance of the criteria detailed in Development Consent DA 92/97 and completion of the protocol for determining if an exceedance is a non-compliance (as outlined in each management plan), MACH Energy shall, in accordance with Condition 2, Schedule 4 of Development Consent DA 92/97:

- notify affected landowners and tenants in writing of the exceedance, and provide regular monitoring results to each of these parties until the MPO is complying with the relevant criteria; and/or
- in the event of an exceedance of the air quality criteria, 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).

Any non-compliances identified will be reported in the Annual Review. The Annual Review will be made publicly available on the MACH Energy website in accordance with Condition 11, Schedule 5 of Development Consent DA 92/97.

6.3 INCIDENTS

An incident is defined in Development Consent DA 92/97 as an occurrence or set of circumstances that may or may not be or cause a non-compliance and causes or threatens to cause material harm, defined as harm that:

- involves actual or potential harm to the health or safety of human beings or to the environment that is not trivial; or
- results in the actual or potential loss or property damage of an amount, or amounts in aggregate, exceeding \$10,000, (such loss includes reasonable costs and expenses that would be incurred in taking all reasonable and practicable measures to prevent, mitigate or make good harm to the environment).

In the event that review of monitoring data indicates that an incident associated with the MPO occurs, which causes or threatens to cause material harm, the incident will be managed in accordance with relevant regulatory approvals and statutory obligations.

The reporting of incidents will be conducted in accordance with Condition 7, Schedule 5 of Development Consent DA 92/97 and in accordance with the protocol for industry notification of pollution incidents under Part 5.7 of the NSW *Protection of the Environment Operations Act, 1997*. MACH Energy will notify the DPIE and any other relevant agencies, in accordance with the PIRMP, immediately after the authorised person becomes aware of the incident which causes or threatens to cause material harm.

The notification must be made in writing to compliance@planning.nsw.gov.au and will:

- identify the MPO (including the Development Application number and name); and
- describe the location and nature of the incident.

7 REVIEW

The Environmental Superintendent will undertake regular inspections, internal audits and initiate directions identifying any remediation/rectification work required, and areas of actual or potential non-compliance.

Annual Review

In accordance with Condition 3, Schedule 5 of Development Consent DA 92/97, MACH Energy will review and evaluate the environmental performance of the MPO by the end of March each year or other such timing as agreed by the Secretary of the DPIE.

The Annual Review will:

- describe the development (including any rehabilitation) that was carried out in the past year, and the development that is proposed to be carried out over the next year;
- include a comprehensive review of the monitoring results and complaints records of the MPO over the past year, which includes a comparison of these results against the:
 - relevant statutory requirements, limits or performance measures/criteria;
 - monitoring results of previous years; and
 - relevant predictions in the EIS, MOD 1 EA, MOD 2 EA, MOD 3 EA, MOD 4 EA and Project layout plans;
- identify any non-compliances over the past year, and describe what actions were (or are being) taken to ensure compliance;
- identify any trends in monitoring data over the life of the MPO;
- identify any discrepancies between the predicted and actual impacts of the MPO, and analyse the potential cause of any significant discrepancies; and
- describe what measures will be implemented over the next year to improve the environmental performance of the MPO.

The Annual Review will be made publicly available on the MACH Energy website in accordance with Condition 11, Schedule 5 of Development Consent DA 92/97.

Independent Environmental Audit

In accordance with the conditions provided by the DPIE on 7 July 2017, MACH Energy commissioned and commenced an Independent Environmental Audit by 25 November 2017 and submitted a copy of the audit report to the Secretary on 18 May 2018.

Subsequent versions of the Independent Environmental Audit will be provided to the Secretary of the DPIE and made available on the MACH Energy website. The Independent Environmental Audit will be conducted by a suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Secretary of the DPIE.

8 REFERENCES

Department of Planning and Environment (2016) *Community Consultative Committee Guidelines State Significant Projects*.

EMGA Mitchell McLennan (2010) *Mount Pleasant Project Modification Environmental Assessment Report*. Prepared for Coal & Allied Operations Pty Ltd.

Environmental Resources Management Mitchell McCotter (1997) *Mount Pleasant Operation Environmental Impact Statement*.

MACH Energy Australia Pty Ltd (2017a) *Mount Pleasant Operation (DA 92/97) – South Pit Haul Road Modification*.

MACH Energy Australia Pty Ltd (2017b) *Mount Pleasant Operation – Mine Optimisation Modification Environmental Assessment*.

MACH Energy (2017c) *Mount Pleasant Operation – Rail Modification Environmental Assessment*.

APPENDIX A

ENVIRONMENTAL POLICY

ENVIRONMENTAL POLICY

MACH Energy Australia Pty Ltd (MACH Energy) is committed to achieving an excellent standard of environmental performance from all its business activities.

MACH Energy commits to:

- Promoting a culture in which everyone takes responsibility for protecting the environment;
- Measuring our performance against objectives and targets to drive continual improvement of our environmental performance;
- Maintaining clear and consistent communication and consultation with our stakeholders with the intent of enhancing environmental outcomes;
- Identifying, assessing, communicating and managing our environment risks;
- Complying with all relevant legislative and regulatory requirements;
- Ensure incidents, including near misses, are reported and investigated in a timely manner to prevent a recurrence;
- Being a learning organisation; and
- Providing the systems, resources and training to meet our commitments.

Finding ways to continually make advances in environmental sustainability is embedded in the way we conduct our business.



Ferdian Purnamasidi
Managing Director
December 2018

APPENDIX B

SITE ENVIRONMENTAL MANAGEMENT – ROLES AND RESPONSIBILITIES

Site Environmental Management – Roles and Responsibilities

Role	Responsibility
General Manager Operations	<ul style="list-style-type: none"> Perform in an overview role to provide strategic direction. Provide adequate resources to implement and support the requirements of the Environmental Management Strategy (EMS). Ensure overall compliance of the Mount Pleasant Operation (MPO) with legislation and approvals. Provide support for the development of strategies, systems and plans to address all legal requirements associated with the MPO.
Department Managers	<ul style="list-style-type: none"> Assess environmental aspects and impacts of the operation during mine planning process and during the risk assessment process. Coordinate activities under their supervision in accordance with the EMS and related sub-plans, procedures, and programs. Consider past environmental performance when engaging contractors. Participate in reviews of the EMS.
External Relations Manager	<ul style="list-style-type: none"> Assist with the response to incidents. Assist with the notification and reporting of incidents. Manage external government and community consultation. Manage communications with Bengalla Mine.
Environmental Superintendent	<ul style="list-style-type: none"> Manage the implementation of Environmental Management Plans (EMPs), approvals, licences and permits. Manage internal auditing and regulatory reporting (including the Annual Review). Manage and drive progressive rehabilitation planning, development and reporting. Support staff environmental training. Responsible for obtaining necessary environmental approvals. Develop corrective action management plans for any non-compliance in consultation with the relevant area manager. Coordinate the development, communication, implementation and maintenance of management plans and environmental monitoring programs and regularly review environmental monitoring data for compliance with relevant criteria.
Department Supervisors	<ul style="list-style-type: none"> Responsible for site environmental monitoring. Responsible for implementation and compliance with EMPs. Provide support for Environmental Superintendent's responsibilities. Provide support and advice to the operation including department managers and general staff and contractors. Undertake regular site inspections and audits to maintain compliance with the EMPs and legislative requirements relating to the MPO. Oversee activities undertaken at the MPO to assist in managing environmental aspects in accordance with the MPO management and legislative requirements. Implementation of corrective actions arising from environmental incidents and audit. Coordinate the activities of specialist sub-consultants and project personnel for environmental assessment/monitoring/auditing responsibilities in accordance with the MPO Management Systems.
Safety and Training Department	<ul style="list-style-type: none"> Maintain the Emergency Response Team. Maintain records of training. Maintain Emergency Response Plans. Maintain chemical registers.
All Employees and Contractors	<ul style="list-style-type: none"> All general employees trained in environmental procedures and protocols as part of the induction process and regular site meetings. All general employees responsible for immediately reporting environmental incidents. All general employees responsible for undertaking works in an environmentally sound manner and in accordance with EMPs and site commitments.

APPENDIX C

ENVIRONMENTAL MANAGEMENT PLANS REQUIRED UNDER DEVELOPMENT CONSENT DA 92/97

[Available on the MACH Energy Website]

<http://machenergyaustralia.com.au/>

APPENDIX D

DEVELOPMENT CONSENT DA 92/97

ENVIRONMENTAL PLANNING AND ASSESSMENT ACT, 1979 (UNAMENDED)

**DETERMINATION OF DEVELOPMENT APPLICATION
PURSUANT TO SECTION 91**

I, the Minister for Urban Affairs and Planning, pursuant to Section 101 of the unamended Environmental Planning and Assessment Act, 1979 ("the Act"), determine the development application ("the application") referred to in Schedule 1 by granting consent to the application subject to the conditions set out in Schedule 2.

The reasons for the imposition of the conditions are to:

- (i) minimise the adverse impact the development may cause through water and air pollution, noise and visual disturbance;
- (ii) provide for environmental monitoring and reporting; and
- (iii) set requirements for infrastructure provision.

Signed

Andrew Refshauge
Minister for Urban Affairs and Planning

Sydney, 22 December 1999 File No. N95/00147

Red text represents MOD 1 dated 19 September 2011
Blue text represents MOD 2 dated 29 March 2017
Green text represents MOD 3 dated 24 August 2018
Purple text represents MOD 4 dated 16 November 2018

SCHEDULE 1

Development Application:	DA 92/97
Applicant:	MACH Energy Australia Pty Ltd
Consent Authority:	Minister for Urban Affairs and Planning
Land:	See Appendix 1
Development:	Construction and operation of the Mt Pleasant open cut coal mine and associated infrastructure

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DEFINITIONS

Annual review	The review required by condition 3 of Schedule 5
Applicant	MACH Energy Australia Pty Ltd, or any person/s who rely on this consent to carry out development that is subject to this consent
ARTC	Australian Rail Track Corporation
BCA	Building Code of Australia
Blast misfire	The failure of one or more holes in a blast pattern to initiate
CCC	Community Consultative Committee
CHPP	Coal Handling and Preparation Plant
Conditions of this consent	Conditions contained in Schedules 2 to 5 inclusive
Council	Muswellbrook Shire Council
Day	The period from 7am to 6pm on Monday to Saturday, and 8am to 6pm on Sundays and Public Holidays
Decommissioning	The deconstruction or demolition and removal of works installed as part of the development
Demolition	The deconstruction and removal of buildings, sheds and other structures on the site
Department	Department of Planning and Environment
Development	The development described in the documents listed in condition 2 of Schedule 2, as modified by the conditions of this consent
DPI	Department of Primary Industries
Dol Water	Department of Industry - Water
DRG	Division of Resources and Geoscience within the Department
EA (MOD 1)	The Environmental Assessment for the Mt Pleasant Project Modification prepared by EMGA Mitchell McLennan, dated October 2010; the associated response to submissions, dated December 2010; and the addendum to the environmental assessment, dated 31 August 2011
EA (MOD 2)	The Environmental Assessment titled <i>Mount Pleasant Operation (DA 92/97) – South Pit Haul Road Modification</i> prepared by MACH Energy Australia Pty Ltd dated 30 January 2017
EA (MOD 3)	The Environmental Assessment titled <i>Mount Pleasant Operation Mine Optimisation Modification</i> prepared by MACH Energy Australia Pty Ltd, dated 31 May 2017, including the <i>Response to Submissions</i> and covering letter, dated 23 November 2017, provided by the Applicant in support of the application
EA (MOD 4)	The Environmental Assessment titled <i>Mount Pleasant Operation Rail Modification</i> prepared by MACH Energy Australia Pty Ltd, dated 18 December 2017, including the <i>Response to Submissions</i> , dated 25 June 2018 and additional information, dated 14 August 2018, 7 September 2018, and 24 September 2018, provided by the Applicant in support of the application
EIS	The Environmental Impact Statement for the Mt Pleasant Mine, prepared by ERM Mitchell McCotter and dated September 1997, as modified by the Applicant's submissions to the Commission of Inquiry into the establishment and operation of the Mt Pleasant Mine
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
EP&A Regulation	<i>Environmental Planning and Assessment Regulation 2000</i>
EPL	Environment Protection Licence issued under the POEO Act
Evening	The period from 6pm to 10pm
Environment	Includes all aspects of the surroundings of humans, whether affecting any human as an individual or in his or her social groupings
Feasible	Means what is possible and practical in the circumstances
Incident	An occurrence or set of circumstances that causes or threatens to cause material harm and which may or may not be or cause a non-compliance
Land	In general, the definition of land is consistent with the definition in the EP&A Act. However, in relation to the noise and air quality conditions in Schedules 2-5 it means the whole of a lot, or contiguous lots owned by the same landowner, in a current plan registered at the Land Titles Office at the date of this modification
m	Metres
Material harm	Is harm that: <ul style="list-style-type: none"> involves actual or potential harm to the health or safety of human beings or to the environment that is not trivial, or results in actual or potential loss or property damage of an amount, or amounts in aggregate, exceeding \$10,000, (such loss includes the reasonable costs and expenses that would be incurred in taking all reasonable and practicable measures to prevent, mitigate or make good harm to the environment) This definition excludes “harm” that is authorised under either this consent or any other statutory approval
Mine water	Water that accumulates within, or drains from, active mining and infrastructure areas and any other areas where runoff may have come into contact with coal or carbonaceous material

Minimise	Implement all reasonable and feasible mitigation measures to reduce the impacts of the development
Mining operations	The carrying out of mining, including the extraction, processing, stockpiling and transportation of coal on the site and the associated removal, storage and/or emplacement of vegetation, topsoil, overburden and reject material
Minister	Minister for Planning, or delegate
Minor	Small in quantity, size and degree
Mitigation	Activities associated with reducing the impacts of the development
Modification 4	The modification to the development as described in EA (MOD 4)
NAG	Noise assessment group
MOD 4 rail infrastructure	The rail infrastructure as described in EA (MOD 4) and shown in Figure 2 of Appendix 2
MOD 4 water infrastructure	The water supply pipeline, pump station and ancillary infrastructure described in EA (MOD 4) and identified as "MPO Hunter River Supply Pipeline" in Figure 2 of Appendix 2
MOD 4 construction works	All physical works associated with the establishment of the rail and water infrastructure as described in EA (MOD 4)
Negligible	Small and unimportant, such as to be not worth considering
Night	The period from 10pm to 7am on Monday to Saturday, and 10pm to 8am on Sundays and public holidays
Non-compliance	An occurrence, set of circumstances or development that is a breach of this consent
OEH	Office of Environment and Heritage
Operational noise	Means noise, including construction and rail noise, generated by the development within the Mining Lease Boundary as shown in Figure 2 of Appendix 2
POEO Act	Protection of the Environment Operations Act 1997
Privately-owned land	Land that is not owned by a public agency, or a mining company (or its subsidiary)
Public infrastructure	Linear and related infrastructure that provides services to the general public, such as roads, railways, water supply, gas supply, drainage, sewerage, telephony, telecommunications etc
Rail loop and infrastructure corridor	The area shaded blue in Figure 3 of Appendix 2
Registered Aboriginal Parties	As described in the <i>National Parks and Wildlife Regulation 2009</i>
Reasonable	Reasonable relates to the application of judgement in arriving at a decision, taking into account: mitigation benefits, cost of mitigation versus benefits provided, community views and the nature and extent of potential improvements
Rehabilitation	The treatment or management of land disturbed by the development for the purpose of establishing a safe, stable and non-polluting environment, and includes remediation
Relinquishment area	The area delineated as "Area Relinquished for Overburden Emplacement and Major Infrastructure" in Figure 3 of Appendix 2
Remediation	Activities associated with partially or fully repairing the impacts and/or environmental consequences of the development
ROM	Run-of-mine
RMS	Roads and Maritime Services
SANSW	Subsidence Advisory NSW
Secretary	Planning Secretary under the EP&A Act, or nominee
Site	The land listed in Appendix 1
Southern catchment	The catchment located in the south west corner of the site and identified in Figure 12 of the EIS as the active fines emplacement
Statement of commitments	The Applicant's commitments in Appendix 3

SCHEDULE 2 ADMINISTRATIVE CONDITIONS

OBLIGATION TO MINIMISE HARM TO THE ENVIRONMENT

1. In addition to meeting the specific performance measures and criteria established under this consent, the Applicant must implement all reasonable and feasible measures to prevent, and if prevention is not reasonable and feasible, minimise, any material harm to the environment that may result from the construction and operation of the development, and any rehabilitation required under this consent.

TERMS OF CONSENT

2. The Applicant must carry out the development:
 - (a) generally in accordance with the EIS, EA (MOD 1), EA (MOD 2), EA (MOD 3), EA (MOD 4) and project layout plans; and
 - (b) in accordance with the Statement of Commitments and conditions of this consent.

Notes:

- The project layout plans are shown in Appendix 2.
- The Statement of Commitments is reproduced in Appendix 3.

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).
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.

LIMITS ON CONSENT

Mining Operations

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.

Coal Extraction

6. The Applicant must not extract more than 10.5 million tonnes of ROM coal from the site in a calendar year.

Coal Transport

7. Product coal may only be transported from the site 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.

STRUCTURAL ADEQUACY

9. All new buildings and structures, and any alterations or additions to existing buildings and structures, that are part of the development, must be constructed in accordance with:
 - (a) the relevant requirements of the BCA; and
 - (b) any additional requirements of SA NSW where the building or structure is located on land within a declared Mine Subsidence District.

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.

DEMOLITION

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.

PROTECTION OF PUBLIC INFRASTRUCTURE

11. Unless the Applicant and the applicable authority agree otherwise, the Applicant **must**:
 - (a) repair, or pay the full costs associated with repairing, any public infrastructure that is damaged by the development; and
 - (b) relocate, or pay the full costs associated with relocating, any public infrastructure that needs to be relocated as a result of the development,

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.

OPERATION OF PLANT AND EQUIPMENT

12. The Applicant **must** ensure that all plant and equipment used on site, or to transport coal from the site, is:
 - (a) maintained in a proper and efficient condition; and
 - (b) operated in a proper and efficient manner.

APPLICATION OF EXISTING STRATEGIES, PLANS OR PROGRAMS

13. The Applicant must continue to apply existing management strategies, plans or monitoring programs approved prior to the approval of Modification 4, until the approval of a similar plan, strategy or program following the approval of Modification 4.

13. Deleted

PLANNING AGREEMENT

14. By the end of March 2012, unless otherwise agreed by the Secretary, the Applicant **must** enter into a planning agreement with Council in accordance with:
 - (a) Division 6 of Part 4 of the EP&A Act; and
 - (b) the terms of the Applicant's offer dated 14 February 2011, which is summarised in Appendix 4.

This agreement must provide for annual payments to be made to Council with the first period for payment commencing upon the commencement of development on the site.

EVIDENCE OF CONSULTATION

15. Where conditions of this consent require consultation with an identified party, the Applicant must:
 - (a) consult with the relevant party prior to submitting the subject document to the Secretary for approval; and
 - (b) provide details of the consultation undertaken including:
 - (i) the outcome of that consultation, matters resolved and unresolved; and
 - (ii) details of any disagreement remaining between the party consulted and the Applicant and how the Applicant has addressed the matters not resolved.

COMPLIANCE

16. The Applicant must ensure that all of its employees, contractors (and their sub-contractors) are made aware of, and are instructed to comply with, the conditions of this consent relevant to activities they carry out in respect of the development.

APPLICABILITY OF GUIDELINES

17. References in the conditions of this consent to any guideline, protocol, Australian Standard or policy are to such guidelines, protocols, Standards or policies in the form they are in as at the date of this consent.

However, consistent with the conditions of this consent and without altering any limits or criteria in this consent, the Secretary may, when issuing directions under this consent in respect of ongoing monitoring and management obligations, require compliance with an updated or revised version of such a guideline, protocol, Standard or policy, or a replacement of them.

SCHEDULE 3 ENVIRONMENTAL PERFORMANCE CONDITIONS

ACQUISITION UPON REQUEST

1. If the Applicant receives a written request for acquisition from the owner of any land listed in Table 1, then the Applicant must acquire the land in accordance with the procedures in conditions 6-7 of Schedule 4.

Table 1: Land subject to acquisition upon request

Basis	Receiver
Noise	23, 45, 47, 67, 96, 102, 108, 112, 118, 120, 120c, 121, 136, 143a, 143b, 143c, 143d, 143e, 147, 153a, 153b, 156a, 157a, 158, 159, 447, 448, 449
Noise & Air	43, 43b
Air	20 ² , 21 ²

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.

ADDITIONAL MITIGATION UPON REQUEST

2. Upon receiving a written request from the owner of any residence on any land listed in Table 1 (unless the owner of that land has requested acquisition) or Table 2, the Applicant must implement additional:
 - (a) noise mitigation measures (such as double-glazing, insulation and/or air conditioning); and/or
 - (b) air quality mitigation measures (such as air filters, a first flush roof water drainage system and/or air conditioning),
 as relevant, at the residence(s) in consultation with the owner.

These measures must be reasonable and feasible, and directed towards reducing the noise and/or air quality impacts of the development on the residence(s). The Applicant must also be responsible for the reasonable costs of ongoing maintenance of these additional mitigation measures until the cessation of mining operations.

If within 3 months of receiving this request from the owner, the Applicant and the owner cannot agree on the measures to be implemented, or there is a dispute about the implementation of these measures, then either party may refer the matter to the Secretary for resolution.

Table 2: Land where additional mitigation measures are available on request

Basis	Receiver
Noise	19, 20, 21, 68, 74, 77, 79, 80a, 84a, 86a, 139, 140a, 140c, 154, 203, 207, 257, 258, 259, 526

Note:

1 To identify the locations referred to in Table 2, see the figures in Appendix 5.

NOISE

Noise Criteria

3. Except for the noise-affected land referred to in Table 1, the Applicant must ensure that the operational noise generated by the development does not exceed the criteria in Table 3 at any residence on privately-owned land.

Table 3: Noise criteria dB(A)

Receiver or other location	Day	Evening	Night	
	L_{Aeq}(15min)	L_{Aeq}(15min)	L_{Aeq}(15min)	L_{A1}(1min)
68, 74	43	42	42	45
86a	42	42	42	45
35, 35b, 77	42	41	41	45
79, 80a, 140c, 526	41	41	41	45
289	41	40	40	45
84a, 139, 154, 203, 257, 258a	40	40	40	45
83	40	39	39	45
86b, 140a, 202, 259	39	39	39	45

198, 202b	38	38	38	45
260, 261	37	37	37	45
169, 272	36	36	36	45
NAG 5 - All privately-owned land	41	40	39	45
NAG 6 - All privately-owned land	37	37	37	45
NAG 7 - All privately-owned land	40	37	37	45
NAG 8 - All privately-owned land	41	39	39	45
NAG 9 - All privately-owned land	39	38	37	45
NAG 11 - All privately-owned land	37	36	35	45
All other privately-owned land	35	35	35	45

Notes:

- To identify the locations referred to in Table 3, see the figures in Appendix 5.
- Noise generated by the development is to be measured in accordance with the relevant procedures and exemptions (including certain meteorological conditions) of the NSW Industrial Noise Policy, with the exception of the application of modifying factors under Fact Sheet C of the Noise Policy for Industry.

However, these criteria do not apply if the Applicant has a written agreement with the relevant landowner to exceed the criteria, and the Applicant has advised the Department in writing of the terms of this agreement.

4. Deleted

Cumulative Noise Criteria

- 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.

Table 5: Cumulative noise criteria dB(A) L_{Aeq} (period)

Location	Day	Evening	Night
NAG 8, 9	55	45	40
All other privately-owned land	50	45	40

Notes:

- To identify the locations referred to in Table 5, see the figures in Appendix 5; and
- Cumulative noise is to be measured in accordance with the relevant procedures and exemptions (including certain meteorological conditions) of the NSW Industrial Noise Policy.

6. Deleted

Rail Noise

- 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).

Noise Operating Conditions

- The Applicant must:
 - 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;
 - minimise the noise impacts of the development during temperature inversions;
 - 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
 - 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.

Note: Monitoring under this consent is not required at all residences and the use of representative monitoring locations can be used to demonstrate compliance with criteria, if agreed to by the Secretary.

Noise Management Plan

9. The Applicant **must** prepare a Noise Management Plan for the development to the satisfaction of the Secretary. This plan must:
- be submitted to the Secretary for approval by 30 June 2019, unless otherwise agreed by the Secretary;
 - 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);
 - 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.
 - 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.

BLASTING

Blasting Criteria

10. The Applicant **must** ensure that the blasting on the site does not cause exceedances of the criteria in Table 7.

Table 7: Blasting criteria

Location	Airblast overpressure (dB(Lin Peak))	Ground vibration (mm/s)	Allowable exceedance
Residence on privately owned land	120	10	0%
	115	5	5% of the total number of blasts over a period of 12 months
Historic heritage sites	-	10	0%
All public infrastructure	-	50	0%

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.

Blasting Hours

11. The Applicant **must** only carry out blasting on site between 9am and 5pm Monday to Saturday inclusive. No blasting is allowed on Sundays, public holidays, or at any other time without the written approval of the Secretary.

Blasting Frequency

12. Unless otherwise agreed by the Secretary, the Applicant may carry out a maximum of:
- 1 blast a day; and
 - 5 blasts a week, averaged over any calendar year; for the development.

This condition does not apply to blasts that generate ground vibration of 0.5 mm/s or less at any residence on privately-owned land, or to blasts required to ensure the safety of the mine or its workers.

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.

Property Inspections

13. 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.

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.

Property Investigations

14. 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.

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.

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.

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.

Blast Operating Conditions

15. 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.

16. 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:
 - 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
 - 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.

Blast Management Plan

17. The Applicant **must** prepare a Blast Management Plan for the development to the satisfaction of the Secretary. This plan must:

- (a) be submitted to the Secretary for approval prior to carrying out any blasting on site;
- (b) describe the measures that would be implemented to ensure compliance with the relevant conditions of this consent;
- (c) include a road closure management plan, prepared in consultation with Council;
- (d) include a blast monitoring program for evaluating compliance with the relevant conditions of approval; and

- (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.

The Applicant must implement the management plan as approved by the Secretary.

AIR QUALITY & GREENHOUSE GAS

Odour

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.

Greenhouse Gas Emissions

19. The Applicant must implement all reasonable and feasible measures to minimise the release of greenhouse gas emissions from the site.

Air Quality Criteria

20. 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.

Table 8: Long term criteria for particulate matter

Pollutant	Averaging Period	^d Criterion
Total suspended particulate (TSP) matter	Annual	^a 90 µg/m ³
Particulate matter < 10 µm (PM ₁₀)	Annual	^a 25 µg/m ³
Particulate matter < 2.5 µm (PM _{2.5})	Annual	^a 8 µg/m ³

Table 9: Short term criteria for particulate matter

Pollutant	Averaging Period	^d Criterion
Particulate matter < 10 µm (PM ₁₀)	24 hour	^b 50 µg/m ³
Particulate matter < 2.5 µm (PM _{2.5})	24 hour	^b 25 µg/m ³

Table 10: Long term criteria for deposited dust

Pollutant	Averaging Period	Maximum increase in deposited dust level	Maximum total deposited dust level
^c Deposited dust	Annual	^b 2 g/m ² /month	^a 4 g/m ² /month

Notes to Tables 8-10:

^a Total impact (i.e. incremental increase in concentrations due to the development plus background concentrations due to all other sources);

^b Incremental impact (i.e. incremental increase in concentrations due to the development on its own);

^c Deposited dust is to be assessed as insoluble solids as defined by Standards Australia, AS/NZS 3580.10.1:2003: Methods for Sampling and Analysis of Ambient Air - Determination of Particulate Matter - Deposited Matter - Gravimetric Method; and

^d Excludes extraordinary events such as bushfires, prescribed burning, dust storms, sea fog, fire incidents or any other activity agreed by the Secretary.

21. Deleted

Air Quality Operating Conditions

22. The Applicant must:
- implement best practice air quality management, including all reasonable and feasible measures to minimise the odour, fume and dust emissions of the development;
 - minimise visible air pollution generated by the development;
 - minimise, where reasonable and feasible, the extent of potential dust generating surfaces exposed on the site at any given point in time;
 - minimise the air quality impacts of the development during adverse meteorological conditions and extraordinary events (see Note d above under Tables 8-10);
 - regularly assess the real-time air quality monitoring and meteorological forecasting data and relocate, modify and/or stop operations on site to ensure compliance with the relevant conditions of this consent; and

- (f) co-ordinate the air quality management on site with the air quality management at nearby mines (including the Bengalla mine) to minimise cumulative air quality impacts from the mines, to the satisfaction of the Secretary.

Air Quality and Greenhouse Gas Management Plan

23. The Applicant must prepare an Air Quality and Greenhouse Gas Management Plan for the development to the satisfaction of the Secretary. This plan must:
- (a) be submitted to the Secretary for approval prior to carrying out any development on site;
 - (b) describe the measures that would be implemented to ensure compliance with the relevant conditions of this consent, including a real-time air quality management system that employs reactive and proactive mitigation measures;
 - (c) include an air quality monitoring program that:
 - uses a combination of real-time monitors and supplementary monitors to evaluate the performance of the development;
 - includes PM_{2.5} monitoring (although this obligation could be satisfied by the regional air quality monitoring network if sufficient justification is provided);
 - includes a protocol for determining exceedances of the relevant conditions of this consent; and
 - (d) include a protocol that has been prepared in consultation with the owners of nearby mines to minimise the cumulative air quality impacts of the mines.

The Applicant must implement the management plan as approved by the Secretary.

METEOROLOGICAL MONITORING

24. For the life of the development, the Applicant must ensure that there is a meteorological station operating in the vicinity of the site that:
- (a) complies with the requirements in the *Approved Methods for Sampling of Air Pollutants in NSW* guideline; and
 - (b) is capable of continuous real-time measurement of temperature lapse rate in accordance with the *NSW Industrial Noise Policy*, or as otherwise approved by the Secretary.

SOIL & WATER

Note: Under the Water Act 1912 and/or the Water Management Act 2000, the Applicant is required to obtain water licences for the development.

Water Supply

25. The Applicant must ensure that it has sufficient water for all stages of development, and if necessary, adjust the scale of mining operations on site, to match its available water supply to the satisfaction of the Secretary.

Water Discharges

26. The Applicant must ensure that any surface water discharges from the site comply with the:
- (a) discharge limits (both volume and quality) set for the development in any EPL; or
 - (b) relevant provisions of the POEO Act or *Protection of the Environment Operations (Hunter River Salinity Trading Scheme) Regulation 2002*.

Compensatory Water Supply

27. 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.

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.

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.

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.

Water Management Plan

28. 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:

- (a) a Site Water Balance, which must:
 - include details of:
 - sources and security of water supply;
 - water use on site;
 - water management on site;
 - any off-site water transfers; and
 - investigate and implement all reasonable and feasible measures to minimise water use by the development;
- (b) an Erosion and Sediment Control Plan, which must:
 - identify activities that could cause soil erosion, generate sediment or affect flooding;
 - describe measures to minimise soil erosion and the potential for the transport of sediment to downstream waters, and manage any flood risk;
 - describe the location, function, and capacity of erosion and sediment control structures;
 - describe what measures would be implemented to maintain the structures over time;
- (c) a Surface Water Management Plan, which must include:
 - detailed baseline data on surface water flows and quality in creeks and other waterbodies that could potentially be affected by the development;
 - surface water and stream health impact assessment criteria including trigger levels for investigating any potentially adverse surface water impacts;
 - 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;
 - a program to monitor surface water flows and quality in the watercourses that could be affected by the project; and
 - reporting procedures for the results of the monitoring program;
- (d) a Groundwater Management Plan, which must include:
 - detailed plans, including design objectives and performance criteria, for the design and management of the proposed final voids;
 - detailed baseline data of groundwater levels, yield and quality in the region, and privately-owned groundwater bores, that could be affected by the development;
 - groundwater impact assessment criteria including trigger levels for investigating any potentially adverse groundwater impacts;
 - a program to monitor and assess:
 - groundwater inflows to the mining operations;
 - impacts on regional and local (including alluvial) aquifers;
 - impacts on the groundwater supply of potentially affected landowners;
 - impacts on groundwater dependent ecosystems and riparian vegetation;
- (e) a Surface and Ground Water Response Plan, which must include:
 - a response protocol for any exceedances of the surface water and groundwater assessment criteria;
 - measures to offset the loss of any baseflow to watercourses caused by the development;
 - measures to prevent, minimise or offset groundwater leakage from alluvial aquifers caused by the development;
 - measures to compensate landowners of privately-owned land whose water supply is adversely affected by the development; and
 - measures to mitigate and/or offset any adverse impacts on groundwater dependent ecosystems or riparian vegetation.

The Applicant must implement the management plan as approved by the Secretary.

- 28A. 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.

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.

- 28B. The Applicant must notify DoI Water, in writing, within 14 days of completing the following:
- (a) the decommissioning of the MOD 4 water infrastructure; and
 - (b) the decommissioning of existing water supply infrastructure within the rail loop and infrastructure corridor.

BIODIVERSITY

29. Deleted

30. Deleted

31. Deleted

Biodiversity Management Plan

32. The Applicant **must** prepare a Biodiversity Management Plan for the development to the satisfaction of the **Secretary**. This plan must:

- (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**;
- (b) include:
 - a description of the short, medium, and long term measures that would be implemented to:
 - manage the remnant vegetation and habitat on the site; and
 - **avoid and manage remnant vegetation and habitat within the relinquishment area**;
 - a detailed description of the measures that would be implemented over the next 3 years, including the procedures to be implemented for:
 - implementing revegetation and regeneration within the disturbance areas, including establishment of canopy, sub-canopy (if relevant), understorey and ground strata;
 - maximising salvage and beneficial use of resources in areas that are to be impacted, including vegetative, soil and cultural heritage resources;
 - protecting vegetation and soil outside the disturbance areas;
 - rehabilitating creeks and drainage lines on the site, to minimise net loss of stream length and aquatic habitat;
 - managing salinity;
 - conserving and reusing topsoil;
 - undertaking pre-clearance surveys;
 - managing impacts on fauna;
 - landscaping the site and along public roads to minimise visual and lighting impacts;
 - collecting and propagating seed;
 - salvaging and reusing material from the site for habitat enhancement;
 - salvaging, transplanting and/or propagating threatened flora and native grassland;
 - controlling weeds and feral pests;
 - managing grazing and agriculture on site;
 - controlling access; and
 - bushfire management;
 - a program to monitor and report on the effectiveness of these measures, and progress against the performance and completion criteria;
 - 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
 - details of who would be responsible for monitoring, reviewing, and implementing the plan.

The Applicant **must** implement the management plan as approved by the **Secretary**.

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.

Aboriginal Heritage Conservation Strategy

33. The Applicant **must** prepare an Aboriginal Heritage Conservation Strategy for the development to the satisfaction of the **Secretary**. This strategy must:

- (a) be prepared by suitably qualified and experienced persons whose appointment has been endorsed by the **Secretary**;
- (b) be prepared in consultation with OEH and the **Registered Aboriginal Parties**;
- (c) be submitted to the **Secretary** for approval prior to carrying out any development on site;
- (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;
- (e) describe the measures that would be implemented to provide appropriate long term security for the proposed Aboriginal cultural heritage conservation areas; and
- (f) include an action plan for the implementation of the strategy.

The detailed measures for the implementation of the strategy are to be outlined in the Heritage Management Plan (see condition 36).

The Applicant **must** implement the approved strategy as approved from time to time by the **Secretary**.

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. 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.

Oral History

35. 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:
- (a) be prepared by suitably qualified and experienced persons whose appointment has been endorsed by the **Secretary**;
 - (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**;
 - (c) be prepared in accordance with the relevant Heritage Council of NSW guidelines; and
 - (d) include detailed historical research as well as an oral history.

Aboriginal Heritage Management Plan

36. The Applicant **must** prepare a Aboriginal Heritage Management Plan for the development to the satisfaction of the **Secretary**. This plan must:
- (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**;
 - (b) be submitted to the **Secretary** for approval by 30 June 2019, unless otherwise agreed by the **Secretary**;
 - (c) include:
 - a detailed plan for the implementation of the approved Aboriginal Heritage Conservation Strategy (required under condition 34);
 - a description of the measures that would be implemented to:
 - comply with the requirements of any Aboriginal Heritage Impact Permit issued for the development, including any approved archaeological testing and salvage program;
 - store the Aboriginal objects salvaged, both during construction and in the long term;
 - protect, monitor and/or manage all Aboriginal objects on site until the impacts of the development on these objects is unavoidable;
 - minimise the blasting impacts of the development on Aboriginal objects in the vicinity of the site;
 - manage the discovery of any human remains or previously unidentified Aboriginal objects on site;
 - enable **Registered Aboriginal Parties** to get reasonable access to the site during the development;
 - ensure **Registered Aboriginal Parties** are consulted about the conservation and management of Aboriginal cultural heritage on site; and
 - ensure construction personnel receive suitable heritage inductions prior to carrying out any development on site, and that suitable records are kept of these inductions.

The Applicant **must** implement the management plan as approved by the **Secretary**.

Notes:

- 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.
- 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.

TRANSPORT

Removal of Rail Loop and Infrastructure Corridor

37. The Applicant **must**, by no later than 31 October 2022:
- (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);
 - (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;
 - (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;

- (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
- (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.

Note: The rail loop and infrastructure corridor is shown in Figure 3 of Appendix 2.

Road Works

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. The Applicant **must**, at its own expense:
- (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;
 - (b) construct the Mount Pleasant Northern Link Road to Dorset Road, prior to the closure of Castlerock Road;
 - (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;
 - (d) construct the Mount Pleasant Mine Access Road;
 - (e) upgrade the Wybong Road from the Bengalla Link Road to the Mount Pleasant Mine Access Road; and
 - (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.
39. Should the following intersections be required, the Applicant **must** undertake construction works at:
- (a) the intersection of the Western Link Road and access to the mine site;
 - (b) the intersection of the Bengalla Link Road and the Western Link Road;
 - (c) the intersection of the Castlerock/Mount Pleasant Northern Link Road and the Western Link Road; and
 - (d) the intersection of the Mount Pleasant Northern Link Road and Kayuga Road, to the satisfaction of Council and/or RMS.

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.

- 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 *Austrroads 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.

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.

Road Maintenance

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.

Thomas Mitchell Drive

- 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.

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.

Road Access and Signage

- 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.
- 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.

Monitoring of Coal Transport

- 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.

CONSTRUCTION OF RAIL AND WATER SUPPLY INFRASTRUCTURE

- 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.

- 44B. The Applicant must implement the recommendations of the Geotechnical Investigation Report to the satisfaction of the Secretary.
- 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.

- 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.

- 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:
- Work Health and Safety Regulation 2017*;
 - SafeWork NSW Code of Practice – How to Manage and Control Asbestos in the Workplace September 2016;
 - SafeWork NSW Code of Practice – How to Safely Remove Asbestos September 2016;
 - Protection of the Environment Operations (Waste) Regulation 2014*; and
 - the EPA's *Waste Classification Guidelines*.

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:

- required by:
 - NSW Police; or
 - a public authority for the delivery of vehicles, plant or materials; or
- required in an emergency to avoid the loss of life, damage to property or to prevent material harm to the environment; or
- approved under an Out of Hours Work Protocol.

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:

- be prepared in consultation with the EPA and any residents who may be affected by the noise generated by these works;
- address the relevant requirements of the *Interim Construction Noise Guideline* (DECC, 2009); and
- 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.

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).

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 10A: Construction noise criteria

Receiver or other location	Standard Construction Hours dB(A) L_{Aeq}(15min)
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 _{Aeq} (15min) noise criteria in Table 3

Notes:

- To identify the locations referred to in Table 10A, see the figures in Appendix 5.
- The Mining Lease Boundary is shown in Figure 2 of Appendix 2.
- Noise generated by the development is to be measured in accordance with the relevant procedures and exemptions (including certain meteorological conditions) of the NSW Industrial Noise Policy, with the exception of the application of modifying factors under Fact Sheet C of the Noise Policy for Industry.

However, these criteria do not apply if the Applicant has a written agreement with the relevant landowner to exceed the criteria, and the Applicant has advised the Department in writing of the terms of this agreement.

- 44l. 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.

VISUAL

Visual Amenity and Lighting

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.

Additional Visual Mitigation Measures

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.

Note: Except in exceptional circumstances, the Secretary will not require additional visual impact mitigation to be undertaken for residences that are more than 3 kilometres from the mining operations.

Visual Impact Management Plan

47. 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:
- (a) be prepared in consultation with Council, and submitted to the Secretary for approval by 30 June 2019, unless otherwise agreed by the Secretary;
 - (b) provide for the establishment of trees and shrubs and/or the construction of mounding or bunding:
 - along the access road to the mine site;
 - around the water storage dams and coal preparation plant;
 - at other areas identified as necessary for the maintenance of satisfactory visual amenity;
 - (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

- (d) include detailed measures to minimise the visual impacts of the MOD 4 rail infrastructure, including:
- details regarding any proposed light screens, earth bunds and screen planting; and
 - procedures to monitor and maintain the effectiveness of visual impact mitigation measures for the life of the development.

The Applicant must implement the management plan as approved by the Secretary.

BUSHFIRE MANAGEMENT

48. The Applicant must:
- ensure that the development is suitably equipped to respond to any fires on site; and
 - assist the Rural Fire Service and emergency services as much as possible if there is a fire in the vicinity of the site.

WASTE

Waste Minimisation & Disposal

49. The Applicant must:
- minimise the waste (including coal reject) generated by the development;
 - ensure that the waste generated by the development is appropriately stored, handled and disposed of in a lawful manner.

On-site Sewage

50. The Applicant must ensure that all sewage generated on site is treated and disposed of to the satisfaction of Council.

Disposal of Fine Rejects

51. The Applicant must not emplace fine rejects in the southern catchment without the written approval of the Secretary

Waste Management Plan

52. The Applicant must prepare a Waste Management Plan for the development to the satisfaction of the Secretary. This plan must:
- be prepared in consultation with DoI Water and DRG, and submitted to the Secretary for approval prior to carrying any development on site;
 - describe the measures that would be implemented to avoid, minimise, reuse and recycle all waste streams generated by the development;
 - include a fines emplacement plan; and
 - a program to evaluate the fines emplacement plan and methods, with a view to emplacing fines within active mining areas.

The Applicant must implement the management plan as approved by the Secretary.

REHABILITATION

Rehabilitation Objectives

53. 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.

Table 11: Rehabilitation Objectives

Feature	Objective
All areas of the site affected by the development	<ul style="list-style-type: none"> • Safe, stable & non-polluting • Fit for the intended post-mining land use/s
Areas proposed for native ecosystem re-establishment	<ul style="list-style-type: none"> • Restore self-sustaining native woodland ecosystems characteristic of vegetation communities found in the local area, as shown conceptually in Figure 4 in Appendix 2. • Establish areas of self-sustaining: <ul style="list-style-type: none"> – riparian habitat, within any diverted and/or re-established creek lines and retained water features; – potential habitat for threatened flora and fauna species; and – wildlife corridors, as far as is reasonable and feasible,

and as shown conceptually in Figure 4 in Appendix 2.	
Areas proposed for agricultural land	<ul style="list-style-type: none"> • Establish/restore grassland areas to support sustainable agricultural activities • Achieve the nominated land capability classification
Other land affected by the development	<ul style="list-style-type: none"> • Restore ecosystem function, including maintaining or establishing self-sustaining ecosystems comprised of local native plant species (unless DRG agrees otherwise)
Final Landform	<ul style="list-style-type: none"> • Stable and sustainable for the intended post-mining land use/s • Integrated with surrounding natural landforms • Incorporate micro-relief and drainage lines that are consistent with surrounding topography, to the greatest extent practicable • Maximise surface water drainage to the natural environment (excluding final void catchment)
Final voids	<ul style="list-style-type: none"> • Designed as long term groundwater sinks to maximise ground water flows across back filled pits to the final void • Minimise to the greatest extent practicable: <ul style="list-style-type: none"> – the size and depth of final voids; – the drainage catchment of final voids; – any high wall instability risk; and – the risk of flood interaction
Surface infrastructure of the development	<ul style="list-style-type: none"> • To be decommissioned and removed, unless DRG agrees otherwise
Rehabilitation materials	<ul style="list-style-type: none"> • 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
Water quality	<ul style="list-style-type: none"> • Water retained on the site is fit for the intended post-mining land use/s • Water discharged from the site is suitable for receiving waters and fit for aquatic ecology and riparian vegetation
Community	<ul style="list-style-type: none"> • Ensure public safety • Minimise adverse socio-economic effects associated with mine closure

54. By the end of January 2019, unless otherwise agreed by the Secretary, the Applicant must prepare a Rehabilitation Strategy for the development to the satisfaction of the Secretary. This strategy must:
- (a) be prepared by a suitably qualified and experienced person/s whose appointment has been endorsed by the Secretary;
 - (b) be prepared in consultation with DRG and Council;
 - (c) build upon the Rehabilitation Objectives in Table 11 and the conceptual final landform depicted in Figure 4 in Appendix 2, including identification of opportunities for increasing the areas of woodland and habitat connectivity within the rehabilitated landscape;
 - (d) include details of the canopy, sub-canopy, understory 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
 - (e) include an indicative schedule for the staged rehabilitation of the development.

The Applicant must implement the approved strategy as approved from time to time by the Secretary.

Progressive Rehabilitation

55. The Applicant must rehabilitate the site progressively, that is, as soon as reasonably practicable following disturbance. All reasonable steps must be taken to minimise the total area exposed at any time. Interim stabilisation and temporary vegetation strategies must be employed when areas prone to dust generation, soil erosion and weed incursion cannot be permanently rehabilitated.

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.

- 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.

Note: The Applicant's obligations under this condition will cease following the transfer or grant of a mining lease over that part of ML 1645 south of Wybong Road to the operator of Bengalla mine (or its nominee).

Rehabilitation Management Plan

56. By the end of April 2019, unless otherwise agreed by the Secretary, the Applicant must prepare a Rehabilitation Management Plan for the development to the satisfaction of DRG. This plan must:
- (a) be prepared by a suitably qualified and experienced person/s whose appointment has been endorsed by the Secretary;
 - (b) be prepared in consultation with the Department, DoI Water, OEH, DPI, and Council;
 - (c) be prepared in accordance with any relevant DRG Guideline;
 - (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;
 - (e) include a detailed plan for the reinstatement and review of the proposed:
 - 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
 - rehabilitated woodland areas and fauna habitat, including a protocol for periodic trials to demonstrate that the target vegetation community is being achieved;
 - (f) include detailed performance and completion criteria for evaluating the performance of the rehabilitation of the site, and for triggering remedial action (if necessary);
 - (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;
 - (h) include procedures for the use of interim stabilisation and temporary vegetation strategies, where reasonable to minimise the area exposed for dust generation;
 - (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);
 - (j) to the maximum extent practicable build on and integrate with the other management plans required under this consent; and
 - (k) include detailed scheduling for progressive rehabilitation to be initiated, undertaken and/or completed over the next three years.

The Applicant must implement the management plan as approved by DRG.

SCHEDULE 4 ADDITIONAL PROCEDURES

NOTIFICATION OF LANDOWNERS

1. By the end of December 2011, the Applicant **must**:
 - (a) notify in writing the owners of:
 - the land listed in Table 1 of **Schedule 3** that they have the right to require the Applicant to acquire their land at any stage of the development;
 - any residence on the noise-affected land in Table 1 or Table 2 of **Schedule 3** that they are entitled to ask for additional noise mitigation measures to be installed at their residence at any stage of the development;
 - any residences on the air quality-affected land listed in Table 1 that they are entitled to ask for additional air quality mitigation measures to be installed at their residence at any stage of the development;
 - any privately-owned land within 2 kilometres of the approved open cut mining pit on the site that they are entitled to ask for an inspection to establish the baseline condition of any buildings and/or structures on their land, or to have a previous property inspection updated; and
 - (b) send a copy of the NSW Health fact sheet entitled "Mine Dust and You" (as may be updated from time to time) to the owners and/or existing tenants of any land (including mine-owned land) where the predictions in the **documents listed in condition 2(a) of Schedule 2** identify that dust emissions generated by the development are likely to be greater than the relevant air quality criteria in **Schedule 3** at any time during the life of the development.

Within one month of any modification that leads to new land being added to Tables 1 or 2 of **Schedule 3**, the Applicant must notify affected land owners in accordance with the requirements of paragraph (a).

- 1A. Prior to entering into any tenancy agreement for any land owned by the Applicant that is predicted to experience exceedances of the recommended dust and/or noise criteria, the Applicant **must**:
 - (a) advise the prospective tenants of the potential health and amenity impacts associated with living on the land, and give them a copy of the NSW Health fact sheet entitled "Mine Dust and You" (as may be updated from time to time); and
 - (b) advise the prospective tenants of the rights they would have under this consent, to the satisfaction of the Secretary.
2. As soon as practicable after obtaining monitoring results showing:
 - (a) exceedance of the relevant criteria in **Schedule 3**, the Applicant **must** notify the affected landowner and tenants in writing of the exceedance, and provide regular monitoring results to each of these parties until the development is complying with the relevant criteria again; and/or
 - (b) an exceedance of the relevant criteria of **Schedule 3**, the Applicant **must** send a copy of the NSW Health fact sheet entitled "Mine Dust and You" (as may be updated from time to time) to the affected landowners and/or existing tenants of the land (including the tenants of any mine-owned land).

INDEPENDENT REVIEW

3. If an owner of privately-owned land considers the development to be exceeding the criteria in **Schedule 3**, then he/she may ask the **Secretary** in writing for an independent review of the impacts of the development on his/her land.

If the **Secretary** is not satisfied that an independent review is warranted, the **Secretary** will notify the landowner in writing of that decision, and the reasons for that decision, within 21 days of the request for a review.

If the **Secretary** is satisfied that an independent review is warranted, then within 2 months of the **Secretary's** decision, the Applicant **must**:

- (a) commission a suitably qualified, experienced and independent expert, whose appointment has been approved by the **Secretary**, to:
 - consult with the landowner to determine his/her concerns;
 - conduct monitoring to determine whether the development is complying with the relevant criteria; and
 - if the development is not complying with these criteria then:
 - 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;
 - identify the measures that could be implemented to ensure compliance with the relevant criteria; and
- (b) give the **Secretary** and landowner a copy of the independent review.

4. Deleted
5. Deleted

LAND ACQUISITION

6. Within 3 months of receiving a written request from a landowner with acquisition rights, the Applicant **must** make a binding written offer to the landowner based on:
 - (a) the current market value of the landowner's interest in the land at the date of this written request, as if the land was unaffected by the development, having regard to the:
 - existing and permissible use of the land, in accordance with the applicable planning instruments at the date of the written request; and
 - presence of improvements on the land and/or any approved building or structure which has been physically commenced at the date of the landowner's written request, and is due to be completed subsequent to that date, but excluding any improvements that have resulted from the implementation of the additional mitigation measures required under condition 2 of [Schedule 3](#);
 - (b) the reasonable costs associated with:
 - relocating within the Muswellbrook, Singleton or Scone local government area, or to any other local government area determined by the [Secretary](#); and
 - obtaining legal advice and expert advice for determining the acquisition price of the land, and the terms upon which it is to be acquired; and
 - (c) reasonable compensation for any disturbance caused by the land acquisition process.

However, if at the end of this period, the Applicant and landowner cannot agree on the acquisition price of the land and/or the terms upon which the land is to be acquired, then either party may refer the matter to the [Secretary](#) for resolution.

Upon receiving such a request, the [Secretary](#) shall request the President of the NSW Division of the Australian Property Institute to appoint a qualified independent valuer to:

- consider submissions from both parties;
- determine a fair and reasonable acquisition price for the land and/or the terms upon which the land is to be acquired, having regard to the matters referred to in paragraphs (a)-(c) above;
- prepare a detailed report setting out the reasons for any determination; and
- provide a copy of the report to both parties.

Within 14 days of receiving the independent valuer's report, the Applicant **must** make a binding written offer to the landowner to purchase the land at a price not less than the independent valuer's determination.

However, if either party disputes the independent valuer's determination, then within 14 days of receiving the independent valuer's report, they may refer the matter to the [Secretary](#) for review. Any request for a review must be accompanied by a detailed report setting out the reasons why the party disputes the independent valuer's determination. Following consultation with the independent valuer and both parties, the [Secretary](#) will determine a fair and reasonable acquisition price for the land, having regard to the matters referred to in paragraphs (a)-(c) above, the independent valuer's report, the detailed report of the party that disputes the independent valuer's determination and any other relevant submissions.

Within 14 days of this determination, the Applicant **must** make a binding written offer to the landowner to purchase the land at a price not less than the [Secretary's](#) determination.

If the landowner refuses to accept the Applicant's binding written offer under this condition within 6 months of the offer being made, then the Applicant's obligations to acquire the land shall cease, unless the [Secretary](#) determines otherwise.

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.

SCHEDULE 5 ENVIRONMENTAL MANAGEMENT, REPORTING AND AUDITING

ENVIRONMENTAL MANAGEMENT

Environmental Management Strategy

1. If the Secretary requires, the Applicant must prepare an Environmental Management Strategy for the development to the satisfaction of the Secretary. This strategy must:
 - (a) be submitted to the Secretary for approval prior to carrying out any development on site;
 - (b) provide the strategic framework for environmental management of the development;
 - (c) identify the statutory approvals that apply to the development;
 - (d) describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the development;
 - (e) describe the procedures that would be implemented to:
 - keep the local community and relevant agencies informed about the operation and environmental performance of the development;
 - receive, handle, respond to, and record complaints;
 - resolve any disputes that may arise during the course of the development;
 - respond to any non-compliance;
 - respond to emergencies; and
 - (f) include:
 - copies of any strategies, plans and programs approved under the conditions of this consent; and
 - a clear plan depicting all the monitoring to be carried out in relation to the development.

The Applicant must implement the approved strategy as approved from time to time by the Secretary.

Adaptive Management

- 1A. The Applicant must assess and manage development-related risks to ensure that there are no exceedances of the criteria and/or performance measures in Schedule 3. Any exceedance of these criteria and/or performance measures constitutes a breach of this consent and may be subject to penalty or offence provisions under the EP&A Act or EP&A Regulation.

Where any exceedance of these criteria and/or performance measures has occurred, the Applicant must, at the earliest opportunity:

- (a) take all reasonable and feasible steps to ensure that the exceedance ceases and does not recur;
- (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
- (c) implement remediation measures as directed by the Secretary, to the satisfaction of the Secretary.

Management Plan Requirements

2. The Applicant must ensure that the management plans required under this consent are prepared in accordance with any relevant guidelines, and include:
 - (a) detailed baseline data;
 - (b) a description of:
 - the relevant statutory requirements (including any relevant consent, licence or lease conditions);
 - any relevant limits or performance measures/criteria;
 - the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the development or any management measures;
 - (c) a description of the measures that would be implemented to comply with the relevant statutory requirements, limits, or performance measures/criteria;
 - (d) a program to monitor and report on the:
 - impacts and environmental performance of the development;
 - effectiveness of any management measures (see c above);
 - (e) a contingency plan to manage any unpredicted impacts and their consequences;
 - (f) a program to investigate and implement ways to improve the environmental performance of the development over time;
 - (g) a protocol for managing and reporting any:
 - incidents;
 - complaints;
 - non-compliances with statutory requirements; and
 - exceedances of the impact assessment criteria and/or performance criteria; and

- (h) a protocol for periodic review of the plan.

Note: The Secretary may waive some of these requirements if they are unnecessary or unwarranted for particular management plans.

Annual Review

3. 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:
- (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;
 - (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:
 - relevant statutory requirements, limits or performance measures/criteria;
 - monitoring results of previous years; and
 - relevant predictions in the documents listed in condition 2(a) of Schedule 2;
 - (c) identify any non-compliance over the last year, and describe what actions were (or are being) taken to ensure compliance;
 - (d) identify any trends in the monitoring data over the life of the development;
 - (e) identify any discrepancies between the predicted and actual impacts of the development, and analyse the potential cause of any significant discrepancies; and
 - (f) describe what measures will be implemented over the next year to improve the environmental performance of the development.

Revision of Strategies, Plans and Programs

4. Within 3 months of:
- (a) the submission of an annual review under condition 3 above;
 - (b) the submission of an incident report under condition 7 below;
 - (c) the submission of an audit under condition 9 below; and
 - (d) any modification to the conditions of this consent,
- the Applicant must review, and if necessary revise, the strategies, plans, and programs required under this consent to the satisfaction of the Secretary.

Within 4 weeks of conducting any such review, the Applicant must advise the Secretary of the outcomes of the review, and submit any revised documents for the approval of the Secretary.

Notes:

- 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.
- In the event of an inconsistency between condition 4(d) above and any condition in Schedule 3 of this consent, the latter prevails.

Updating & Staging Strategies, Plans or Programs

- 4A. 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.

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.

Notes:

- 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.
- 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.

Management of Cumulative Impacts

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.

Community Consultative Committee

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.

Incident Notification

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.

Non-Compliance Notification

- 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.

Note: A non-compliance which has been notified as an incident does not need to also be notified as a non-compliance.

Monitoring and Environmental Audits

- 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: 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.

Regular Reporting

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**.

INDEPENDENT ENVIRONMENTAL AUDIT

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.**

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.

ACCESS TO INFORMATION

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.
-

**APPENDIX 1
SCHEDULE OF LAND**

Tenure Type	Lot	Section	Deposited Plan Number
Freehold	1	8	2770
Freehold	1	5	2770
Freehold	1	6	2770
Freehold	1	3	2770
Freehold	1	4	2770
Freehold	1	1	2770
Freehold	1	2	2770
Freehold	1		104563
Freehold	1		112742
Freehold	1		114090
State Rail Authority (Crown)	1		189134
Freehold	1	2	192121
Freehold	1	1	192121
Freehold	1		194043
Freehold	1		213293
Freehold	1		254339
Freehold	1		312392
Freehold	1		318999
Freehold	1		401237
Freehold	1		544039
Freehold	1		629491
Freehold	1		634490
Freehold	1		655691
Freehold	1		706645
Freehold	1		742324
Freehold	1		744333
Freehold	1		745369
Freehold	1		780673
Freehold	1		791576
Crown	1		904885
Freehold	1		905281
Freehold	1		906668
Freehold	1		911212
Freehold	1		915913
Freehold	1		944232
Freehold	1		998239
Freehold	1		1072667
Freehold	1		1080962
Freehold	1		1081385
Freehold	1		1100374

Tenure Type	Lot	Section	Deposited Plan Number
Freehold	1		1137590
State Rail Authority (Crown)	1		1129338
Freehold	1		1199733
Freehold	2	8	2770
Freehold	2	5	2770
Freehold	2	6	2770
Freehold	2	3	2770
Freehold	2	1	2770
Freehold	2	4	2770
Freehold	2		104563
Freehold	2		112742
Freehold	2		114090
Freehold	2	2	192121
Freehold	2		194043
Freehold	2		629491
Freehold	2		634490
Freehold	2		706645
Freehold	2		780673
Freehold	2		791576
Freehold	2		801249
Freehold	2		915913
Freehold	2		997931
Freehold	2		998239
Freehold	2		1081385
Freehold	2		1234475
Freehold	3	8	2770
Freehold	3	5	2770
Freehold	3	3	2770
Freehold	3	1	2770
Freehold	3		112742
Freehold	3	2	192121
Freehold	3		194043
Freehold	3		236668
Freehold	3		629491
Freehold	3	28	758554
Freehold	3	29	758554
Freehold	3		791576
Freehold	3		998239
Freehold	3		998477
Freehold	3		1183514

Tenure Type	Lot	Section	Deposited Plan Number
State Rail Authority (Crown)	3		1170997
Freehold	3		1199733
Freehold	3		1234475
Freehold	4	8	2770
Freehold	4	5	2770
Freehold	4	6	2770
Freehold	4	4	2770
Freehold	4	3	2770
Freehold	4	1	2770
Freehold	4	2	2770
Freehold	4	2	192121
Freehold	4	28	758554
Freehold	4	29	758554
Freehold	4		801249
State Rail Authority (Crown)	4		1170997
Freehold	4		1199733
Freehold	4		1234475
Freehold	5	8	2770
Freehold	5	6	2770
Freehold	5	4	2770
Freehold	5	3	2770
Freehold	5	1	2770
Freehold	5		112742
Freehold	5	2	192121
Freehold	5	28	758554
Freehold	5		801249
State Rail Authority (Crown)	5		1170997
Freehold	5		1199733
Freehold	5		1234475
Freehold	6	8	2770
Freehold	6	3	2770
Freehold	6	1	2770
Freehold	6	2	192121
Freehold	6		749716
Freehold	6		750926
Freehold	6	28	758554
Freehold	6		821183
Freehold	6		1199733
Freehold	6		1234475
Freehold	7		112742

Tenure Type	Lot	Section	Deposited Plan Number
Freehold	7	2	192121
Freehold	7		236668
Freehold	7		749716
Freehold	7		784436
Freehold	7		821183
Freehold	7		1170997
Freehold	7		1199733
Freehold	7		1234475
Freehold	8		255048
Freehold	8		770911
Road	8		1072668
Freehold	8		1170997
Freehold	8		1199733
Freehold	9		255048
Freehold	9		750926
Road	9		1072668
Freehold	9		1199733
Freehold	10		255048
Freehold	10		750926
Road	10		1072668
Freehold	10		1184928
Freehold	10		1199733
Freehold	11		112742
Freehold	11		255048
Freehold	11		1051153
Road	11		1072668
Freehold	11		1184928
Freehold	12		112742
Freehold	12		255048
Freehold	12		659924
Road	12		1072668
Freehold	12		1112792
Freehold	13		112742
Freehold	13		255048
Freehold	13		750926
Freehold	13		1112792
Freehold	14	8	2770
Freehold	14		112742
Freehold	14		255048
Freehold	14		1112792
Freehold	15		112742
Freehold	15		255048
Freehold	15		750926

Tenure Type	Lot	Section	Deposited Plan Number
Freehold	15		1112792
Freehold	16		112742
Freehold	16		255048
Freehold	16		750926
Freehold	16		1072668
Freehold	16		1112792
Freehold	17		2770
Freehold	17		112742
Road	17		1072668
Freehold	18		112742
Freehold	18		1072668
Freehold	19		112742
Freehold	19		750926
Road	19		1072668
Freehold	20		112742
Freehold	20		747226
Freehold	20		1072668
Freehold	21		554140
Freehold	21		750926
Freehold	22		554140
Freehold	22		776758
Freehold	22		870608
Freehold	22		1041946
Freehold	22		1072668
Freehold	23		1041946
Freehold	24		742543
Freehold	24		1072668
Freehold	25		1053537
Freehold	25		1072668
Freehold	26		750926
Freehold	26		1072668
Freehold	27		745897
Freehold	27		1072668
Freehold	28		750926
Freehold	29		731706
Freehold	30		137297
Freehold	35		1076510
Freehold	36		1108421
Freehold	38		750926
Freehold	39		750926
Freehold	41		750926
Freehold	42		750926
Freehold	43		750926

Tenure Type	Lot	Section	Deposited Plan Number
Freehold	44		750926
Freehold	45		750926
Freehold	50		809718
Freehold	51		809718
Freehold	71		626353
Freehold	71		750926
Freehold	72		626353
Freehold	72		750926
Freehold	73		750926
Freehold	74		750926
Freehold	86		750926
Freehold	90		750926
Crown	90		1215947
Freehold	91		750926
Freehold	92		750926
Freehold	93		750926
Freehold	94		665393
Road	100		1148907
Freehold	100		1177385
Freehold	101		1148907
Freehold	102		1148907
Freehold	103		1148907
Freehold	104		1148907
Freehold	105		1148907
Freehold	106		1148907
Freehold	122		750926
Freehold	123		700578
Freehold	123		750926
Freehold	124		700578
Freehold	124		750926
Freehold	126		750926
Freehold	127		750926
Freehold	130		750926
Freehold	131		750926
Freehold	132		558246
Freehold	132		750926
Freehold	133		750926
Freehold	135		750926
Freehold	143		750926
Freehold	144		1120266
Freehold	145		1120266
Freehold	146		750926
Freehold	147		1083411

Tenure Type	Lot	Section	Deposited Plan Number
Freehold	149		750926
Freehold	150		750926
Freehold	151		750926
Freehold	152		750926
Freehold	153		750926
Freehold	154		750926
Freehold	164		635272
Freehold	177		750926
Freehold	181		750926
Freehold	184		750926
Freehold	188		750926
Freehold	189		750926
Freehold	190		750926
Freehold	193		750926
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Freehold	196		750926
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Freehold	211		750926
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Freehold	236		750926
Freehold	237		750926
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Freehold	241		750926
Freehold	242		750926
Freehold	251		750926
Freehold	253		750926
Freehold	254		750926
Freehold	256		750926
Freehold	258		750926
Freehold	259		750926

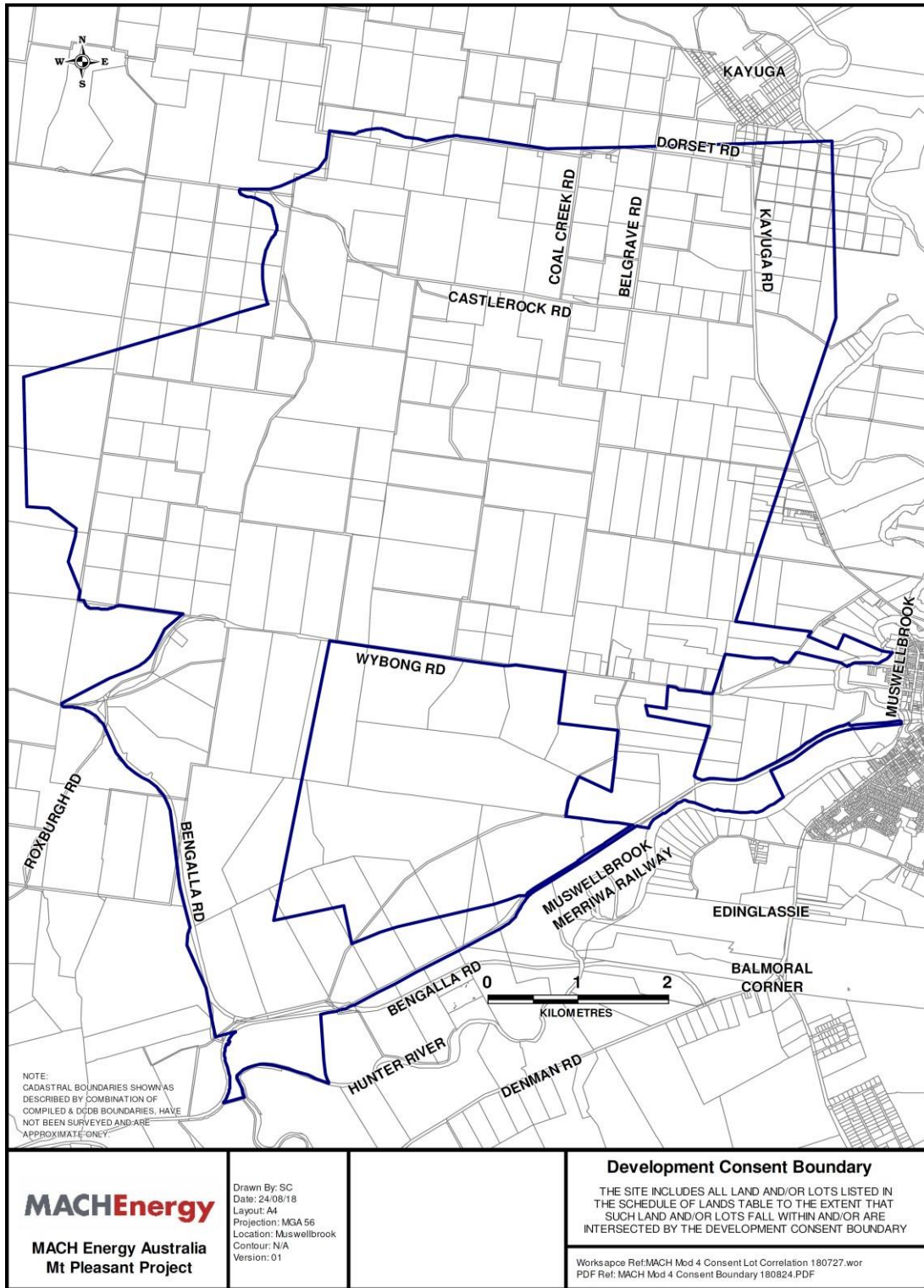
Tenure Type	Lot	Section	Deposited Plan Number
Freehold	260		750926
Freehold	261		561919
Freehold	261		750926
Freehold	262		750926
Freehold	263		750926
Freehold	264		750926
Freehold	265		750926
Freehold	268		567444
Freehold	268		750926
Freehold	269		567444
Freehold	269		750926
Freehold	270		750926
Freehold	271		750926
Freehold	272		750926
Freehold	273		750926
Freehold	274		750926
Freehold	275		750926
Freehold	276		750926
Freehold	278		750926
Freehold	279		750926
Freehold	280		750926
Freehold	282		750926
Freehold	505		711996
Freehold	641		554159
Freehold	1006		1235827
Freehold	1007		1235827
Freehold	1008		1235827
Freehold	1009		1235827
State Rail Authority (Crown)	1031		1164040
Freehold	1453		628493
Crown	7001		93329
Crown	7304		1146786
Freehold	A		174071
Freehold	A		432713
Freehold	B		174071
Freehold	B		432713
Crown Watercourse		Hunter River	
State Rail Authority (Crown)		Muswellbrook Merriwa Railway	
State Rail Authority (Crown)		Railway lands located within, between or adjacent to the above parcels of land	

Tenure Type	Lot	Section	Deposited Plan Number
Muswellbrook Council or Department of Lands (Crown)		Various council and Crown public and unformed roads located within, between or adjacent to the above parcels of land	
Freehold		Any identified or unidentified historical title residues located within, between or adjacent to the above parcels of land	

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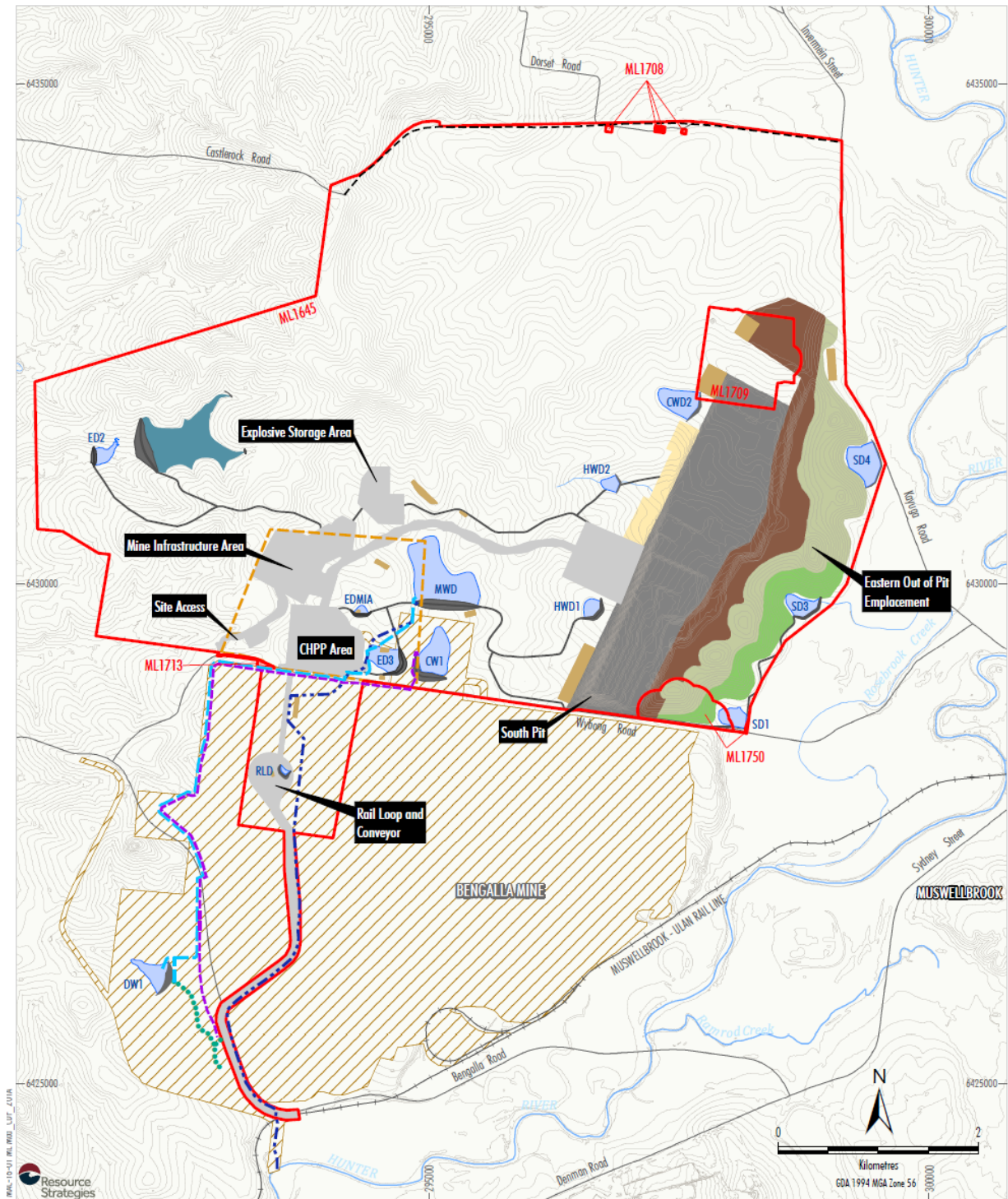
Tenure Type	Lot	Section	Deposited Plan Number
Crown		Creeks or streams located within, between or adjacent to the above parcels of land	
Crown		Any unidentified Crown land or Crown land historical title residues located within, between or adjacent to the above parcels of land	

Note: The Development Consent Boundary is shown conceptually on the figure below.



APPENDIX 2

FIGURE 1 - CONCEPTUAL PROJECT LAYOUT PLAN AT 2021



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

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

MACHEnergy
MOUNT PLEASANT OPERATION

FIGURE 2 - CONCEPTUAL PROJECT LAYOUT PLAN AT 2025



FIGURE 3 - APPROVED SURFACE DISTURBANCE PLAN

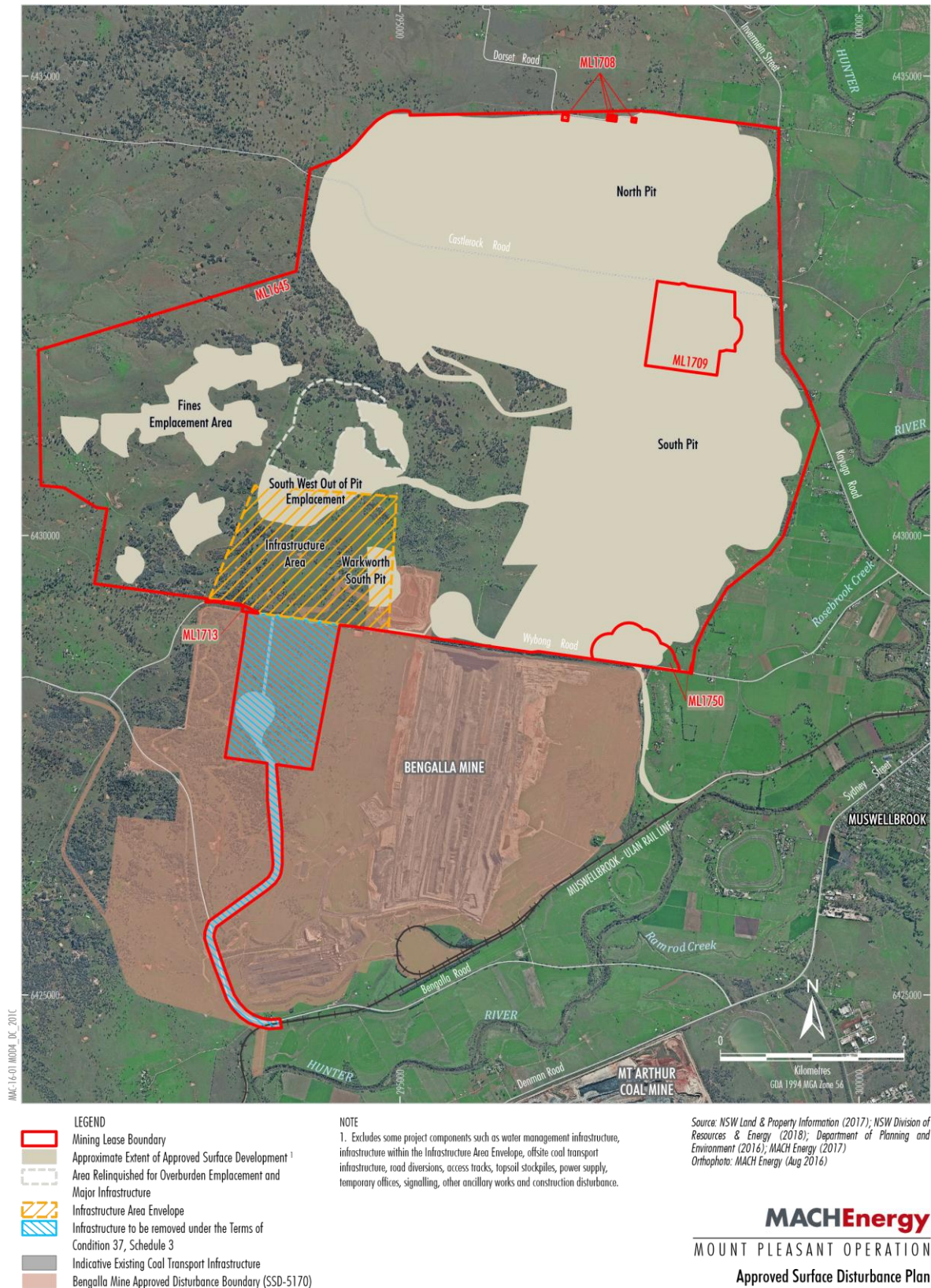


FIGURE 4 - CONCEPTUAL FINAL LANDFORM



APPENDIX 3 STATEMENT OF COMMITMENTS

Environmental aspect	Commitment
Noise and vibration	<ul style="list-style-type: none"> A NMP will be prepared in accordance with the development consent. The NMP will be extended to include management of potential noise emissions associated with the MOD 4 rail infrastructure. The plan will also consider proactive and predictive modelling and management, and protocols for managing noise during adverse meteorological conditions. Noise monitoring will continue to be undertaken in accordance with the development consent. Implementation of the following feasible and reasonable mitigation measures: <ul style="list-style-type: none"> Deleted; plant will operate in less exposed areas during the more sensitive night period; procurement of new and best available technology plant; 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 updating the comprehensive operational noise management plan to include real-time back to base noise monitoring using the best available technology. 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.
Ecology	<ul style="list-style-type: none"> Deleted Details of the rehabilitation of the infrastructure area upon decommissioning will be provided in the REMP. Ecological management for the Mount Pleasant Project will be undertaken in accordance with the existing development consent.
Air quality	<ul style="list-style-type: none"> 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.
Aboriginal cultural heritage	<ul style="list-style-type: none"> Aboriginal cultural heritage management will continue to be undertaken in accordance with relevant Applicant procedures. Deleted 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. Deleted 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). The Aboriginal Heritage Management Plan will be revised to include the proposed modifications and any requirements specified by the regulator. Any mitigation salvage will be staged over time based upon mine operation plan requirements and the zoning regime of the CHMP. 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. All cultural heritage sites not affected by the proposed development will be managed in situ in accordance with the Aboriginal Heritage Management Plan

Environmental aspect	Commitment
	<p>procedures for long-term protective management and to minimise future development disturbance.</p> <ul style="list-style-type: none"> 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.
Visual amenity	<ul style="list-style-type: none"> Visual amenity management will be undertaken in accordance with the development consent, which requires the preparation of a Visual Impact Management Plan. Lighting management will be undertaken in accordance with the development consent, including preparation of an engineering report regarding light emissions.
Deleted	<ul style="list-style-type: none"> Deleted
Deleted	<ul style="list-style-type: none"> Deleted. Deleted
Deleted	<ul style="list-style-type: none"> Deleted
Removal of Mount Pleasant Infrastructure South of Wybong Road	<ul style="list-style-type: none"> <p>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:</p> <ol style="list-style-type: none"> 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); 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; 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 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. <p><i>Note: The obligations under this commitment are not subject to the grant of development consent or any other approvals or access arrangements for alternative coal transport infrastructure for the Development and must be satisfied irrespective of the existence of any such approvals or infrastructure.</i></p>
Flooding	<ul style="list-style-type: none"> <p>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:</p> <ul style="list-style-type: none"> no more than 0.1 m increase in flood levels on any privately-owned land; no more than 0.01 m increase in flood levels at any privately-owned dwellings or commercial spaces; no more than 0.01 m increase in flood levels at any public roads servicing privately-owned properties; and no more than 0.1 metres per second (m/s) increase in flood velocities at privately-owned dwellings or commercial spaces.
Rail Noise	<ul style="list-style-type: none"> 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. The MOD 4 rail infrastructure will be subject to best practice detailed design, including consideration of brake squeal and bunching potential. 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.

Environmental aspect	Commitment
	<ul style="list-style-type: none"> 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.
Redundant Infrastructure Removal in Bengalla Mine Footprint	<ul style="list-style-type: none"> 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. 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.
Visual Vegetation Screens	<ul style="list-style-type: none"> 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.
Construction Traffic	<ul style="list-style-type: none"> 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.
Management of Historic Heritage Items	<ul style="list-style-type: none"> 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. MACH Energy will consult with Council on the content of the photographic record of Overton Orchard and Race Track. 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). 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. 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.

(Note: References to *abbreviations*, *tables*, *sections*, *figures* and *appendices* are references to the EA MOD 1, unless otherwise stated)

APPENDIX 4

GENERAL TERMS FOR THE PLANNING AGREEMENT

The Applicant undertakes to make the following Development Contributions:

Note: where indicated in the following table CPI will be applied to the payment on each anniversary of the payment with the payment being increased in line with the CPI for the previous 12 month period.

Column 1	Column 2
Item	Development Contribution
Proposed Mt Pleasant Community Contribution	\$500,000 per annum (indexed annually according to CPI). A community representative committee will be established, including Applicant representatives, to make recommendations to Council regarding these community contributions.
Council Road Maintenance Costs	Costs associated with the maintenance of roads, as reasonably apportioned to the use of the road by Mount Pleasant, up to a maximum annual payment of \$220,000 per annum (indexed according to CPI). This contribution will be made for the recurrent road maintenance to be used at Councils discretion for that purpose.
Environmental Officer	The Applicant to make contributions to an Environmental Officer, up to a maximum of \$20,000 per annum (indexed annually according to CPI).
Apprenticeships	The Applicant to use its best endeavours to engage 4 apprentices per year for the life of the mine sourced from residents within the Muswellbrook Shire and Aberdeen.

APPENDIX 5

LAND OWNERSHIP, RECEIVER LOCATIONS AND NOISE ASSESSMENT GROUPS

Ref No	Landholder	Ref No	Landholder	Ref No	Landholder
1	MACH ENERGY AUSTRALIA PTY LTD	182	JG & AJ SADLER	302	MJ & MJ DUNCAN
2	BENGALLA MINING COMPANY PTY LTD	189	OB O'BRIEN	305	RH ENGLEBRECHT
3	ANGLO COAL (DARTBROOK MANAGEMENT) PTY LTD	191	JA & JE FIBBINS	400	ROSSGOLE PASTORAL COMPANY PTY LTD
4	JR SCRIVEN	192	IG & CW JINGLE	401	JL & DG DAY
5	COAL OPERATIONS AUSTRALIA LTD	193	GM & KL SMITH	402	PC BRITTAN
6	MUSWELLBROOK RACE CLUB LTD	194	TC & JBA HARRIS	403	WILCROW PTY LTD
7	MUSWELLBROOK COAL COMPANY LTD	195	T & RK YOUNG	404	JL & DG & RW DAY
8	MANGOOLA COAL OPERATIONS PTY LTD	198	TJ & NP GOLDRICK	405	GL & JL DANIELS
19	DP ENGLEBRECHT	199	NA BURLING	406	LE & SR HOLDSWORTH
20	KB & JA BARNETT	200	R EASTON	407	AD LONERGAN
21	MJ MCGOLDRICK	201	PA & MP O'BRIEN	408	SN BATEMAN
23	JABETIN PTY LTD	202	DN RAPHAEL	409	AP CORLISS
35	C HORNE	203	RF & MA MILLARD	410	V BATEMAN
43	JB MOORE	206	WJ HARDES	411	DL CADDEY
45	BA & TE STRACHAN	207	SW & KL BARKLEY	412	JA BAILEY
47	BL & ML BATES	208	FK & WDG ALMOND & PW HUME	413	MUH LUMBY
67	JM SIMPSON	212	DR & CJ TUBB	414	PG LUCK
68	RK & NV GOOGE	213	ENGLEBRECHT RACING STABLES PTY LTD	415	SJ FRANKLAND
74	N & M SORMAZ	214	AL THOMSON-WEIR & RC WEIR	416	RV MITCHELL
77	DM PURSER	215	WJ & CB MCINTOSH	417	M & JA CASTELLANA
79	DW ADNUM	216	NJ KEEVERS	418	PB WATTS
80	WJ ADNUM	217	RRA FARNSWORTH	419	KM BATES & TG WOODS
82	CK BIRCH	218	SY JOHNSON	420	D COLLINS
83	LG & CM KELMAN	219	GL & KL ANDREWS	421	GW RICHARDS
84	GE PITMAN	220	RA BYRNES & MA MOLLER	422	ME DANIELS
86	COWTIME INVESTMENTS PTY LTD	221	TD BARRON	423	DB WRIGHT
96	RP GRAY	222	ML & EA SWEENEY	424	TJ & AD & J LONERGAN & DM MCGUIGAN
102	AJPS MATHER	223	MC & LJ DOBIE	425	JE LONERGAN
108	JS GIBSON	224	DL ROBINSON	426	J BIRCH
112	BD BARRY	225	MR CRANFIELD & JR GLEESON	427	U BYFIELD
118	JM & CA HAYES	249	TW ROOTS	428	JM GOWING
120	DL & PA MOORE	252	RM & KF MERRICK	429	KP & MD & JJ COLLINS & ML WILLIAMSON
121	C & JM MOORE	257	PG & CM LANE	430	DJ HULBERT
136	DG YORE	258	NJ & RY ELLIS	431	GJ DAY
139	RW & LP UPTON	259	MR PEEL	432	REN & TR ADAM & KL CONE
140	DAPKOS PTY LTD	260	PSJ MURRAY	433	CJ ASHFORD & JP BRENNAN
143	JS & NM LONERGAN	261	PR ELLIS	434	GJ & RL JONES
147	MJ & RG ADNUM	271	DE KILGANNON & DS MACDOUGALL	435	MN FRASER
153	GM CASEY	272	GC SPARRE	436	MEDEGATE PTY LTD
154	PD & F STANDING	273	IJ & CM RICHARDS	437	BG & S CANVIN
156	JE & JL LONERGAN	280	MONADELPHOUS PROPERTIES PTY LTD	438	WALFERTAN PROCESSORS PTY LTD
157	RB PARKINSON	281	JR & JA BUCKLEY	439	PITNACREE (BLAIRMORE) PTY LTD
158	JM HOATH	282	JE ANDERSON & KL & J CAMPBELL & MV & DJ & SE & TP HALLETT	440	DARLEY AUSTRALIA PTY LTD
159	JE & MS DUCEY			441	MACQUEEN PROJECTS PTY LTD
169	L GREENSILL & J WATTUS	283	SRP & RF RAY	442	WJ BOURKE
172	RL & CE THOMPSON	285	THE NEW SOUTH WALES GREYHOUND BREEDERS OWNERS & TRAINERS ASSOCIATION LTD	443	RG & K BRADLEY
173	TL KING & JA WARD			444	JW & VL BRACE
174	TJ & ML POWER	286	MUSWELLBROOK SHIRE COUNCIL	445	AUSGRID
176	JAF & LA ALLAN	287	TELSTRA CORPORATION LTD	446	W CLARKE & G HURST & W KELYMACK & G LANE & G WOOLNOUGH
177	FW & HM & SA WHEATLEY	288	LA & JM WEBSTER	447	NM & JS LONERGAN
178	PA NEELY	289	RA & EA LAWMAN	448	JS LONERGAN
179	FW WHEATLEY	292	GR & MK WALSH	449	KM LEE
180	FA WHEATLEY & SON PTY LTD	293	MG & LJ LATHAM	450	KL & GM SMITH
181	KL & HR DAY PTY LTD	296	JM WILD		

Source: NSW Land & Property Information (2018)

MACHEnergy
MOUNT PLEASANT OPERATION
Landholder List

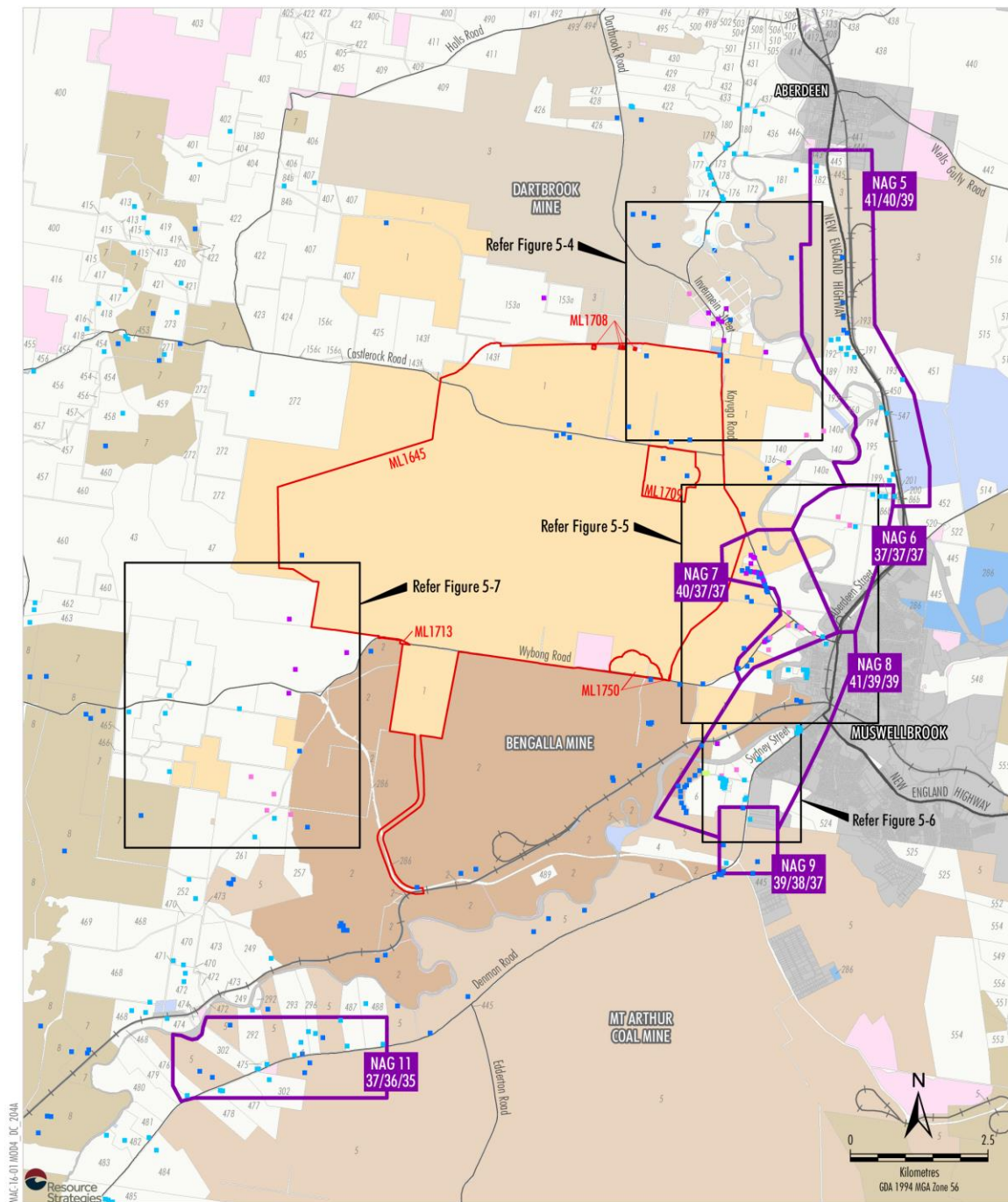
Figure 5-1

Ref No	Landholder	Ref No	Landholder
451	GK & HM SANSOM	506	SA & RP WITHERS
452	AJR MADDEN	507	NE GOLLAN
453	SC & ME DEVER	508	VG FOSTER
454	AP & PE MC MANUS	509	GJ DAY & J WATTUS
455	RP KEAST	510	YR & SG WILKS
456	GT KEAST	511	MJ & KM FARRELL
457	AM PRATT	512	GR & EA MEDHURST
458	HJ WRIGHT	513	DC & GJ WILTON
459	AJ & LL MARTIN	514	BROADCAST AUSTRALIA PTY LTD
460	RG GOWING	515	SB & JA REICHEL
462	SH JENNA	516	MP CLIFFORD
463	IV & CA INGOLD	517	FL COLEMAN & JC THOMAS
464	KL BALMER & JL SMITH	518	VM FRENCH
465	FN & WL GOOGE	520	JEHOVAH'S WITNESSES CONGREGATIONS
466	GT MCNEILL	522	BJ & VR PASSLOW
467	MWJ & LC WALTON	523	HG & MG COPE & PM & FP FARRELL
468	S.R. & J.W. LAWSON (LUNDISFARNE) PTY LTD	524	G GILLFEATHER
469	FN GOOGE	525	IR & F WEBBER
470	JJ & PJ BROWN	526	DL WICKS
471	PJ BROWN	527	DJ & GH CORK
472	JDM MARKHAM	528	AS CHICK
473	MR & M PEEL	529	TH HAMILTON & AM SMITH
474	AA & BT MEYER	530	SC & NJ BULLARD & JM HARRISON
475	EJ & CA DENTON	531	GJ & EA MUNZENBERGER
476	LA & CA MACPHERSON	532	VL ROSE
477	MW TURNER	533	MJ BROWN
478	RL ANGUS	534	EE MARKS
479	HM WENG & FYP ZHU	535	GL & DN HORTON
480	HR & BC GRUGEON	536	LJ CUMMINS
481	RL WILKS	537	TJ D'HERVILLE
482	DJ PHILLIPS	538	KD POWER & T VERO
483	RW JONES	539	PH CURTAIN & CA SINGLETON
484	TR & KM PAULSEN	540	GRENTILL PTY LTD
485	PR & M BURGMANN	541	JG HINDER & VG MATHEWS
486	GW & HM BLAKE	542	PE & GJ CHAPMAN
487	E RANKIN	543	KD CLOSE
488	E & WJ RANKIN	544	DS & RM NEWTON
489	ALIFORM PTY LTD	545	JA GREEN
490	RL GORDON	546	SJ SCOTT
491	PW GILLIGAN	547	LA & FK & G BRYANT
492	HM & CR GOODSSELL	548	WANARUAH LOCAL ABORIGINAL LAND COUNCIL
493	AW & JC YOUNG	549	TTW KEAST & RA SUMNER
494	BJ & K FLAHERTY	550	SR PAGE
495	DAVHAM NOMINEES PTY LTD	551	PA & SL RYAN
496	RW DAVIS	552	MT PERRAM
498	SCONE POLO CLUB INCORPORATED	553	MF & AV DOHERTY
499	RD & TL JONES	554	K CASBEN
500	GWRD HOLDINGS PTY LTD	555	GLENDOWER PASTORAL CO PTY LTD & GYARRAN PTY LTD
501	JW TAYLOR	556	CS JACOBSEN
502	LC SCOWEN	557	CJ & LE DUCK
503	JR GORDON		
504	MT O'CONNELL		
505	GC O'HARA		

Sources: NSW Land & Property Information (2018)

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MOUNT PLEASANT OPERATION
Landholder List

Figure 5-2



- LEGEND**
- Mining Lease Boundary
 - Muswellbrook and Upper Hunter LEPs Zones B2, B5, IN1, SP2, R2, R5, RE1, RE2 and W1
 - Crown
 - Crown/State of NSW
 - The State of NSW
 - Muswellbrook Shire Council
 - Upper Hunter Shire Council
 - Mount Pleasant Controlled
 - Bengalla Controlled
 - Dartbrook Controlled
 - Mt Arthur Controlled
 - Other Mining/Resource Company Controlled
 - Privately Owned Land

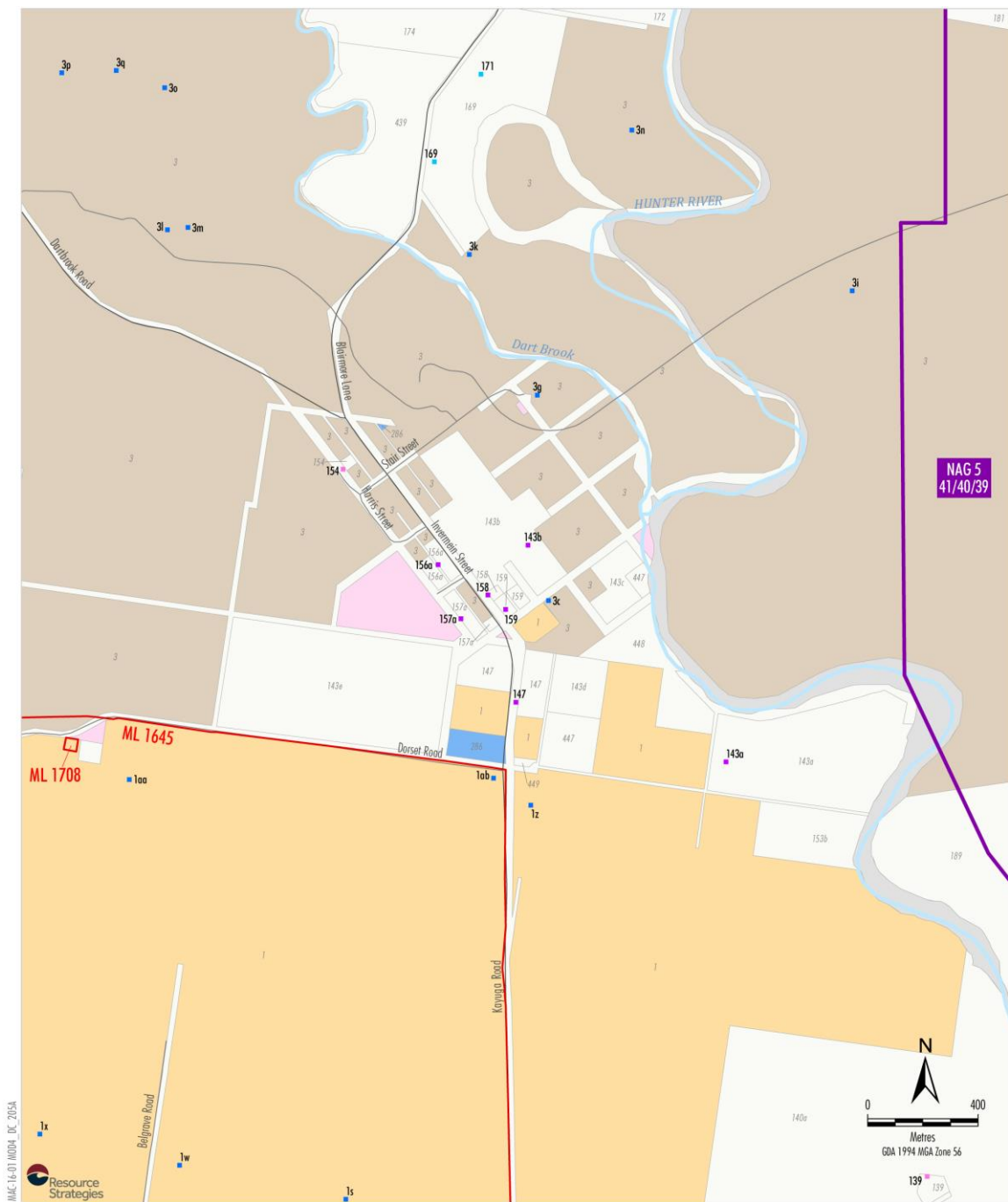
- Mine-owned Dwelling
- Privately-owned Residence - MPO Acquisition on Request
- Privately-owned Residence - MPO Mitigation/Acquisition on Request *
- Privately-owned Residence - MPO Mitigation on Request
- Other Privately-owned Residence
- Noise Assessment Group (NAG)
- 37/36/35
- Default NAG Noise Criteria for Day/Evening/Night

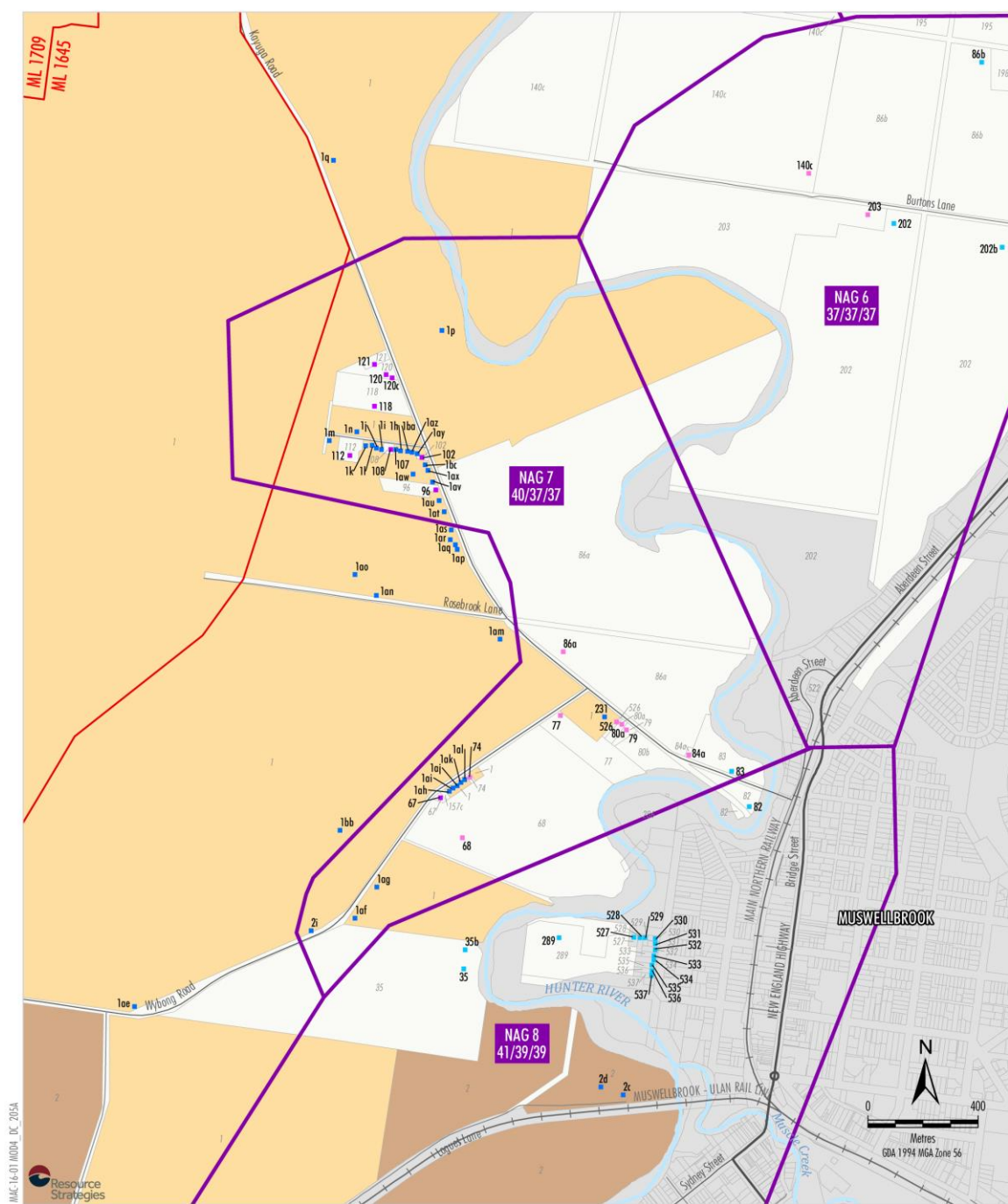
* MPO Mitigation on Request - rail noise. MPO is only required to acquire and/or install air quality mitigation measures at this property if acquisition and/or mitigation is not reasonably achievable under a separate approval for the Bengalla Mine.

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

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MOUNT PLEASANT OPERATION
Land Ownership

Figure 5-3





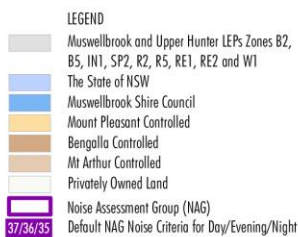
- LEGEND**
- Mining Lease Boundary
 - Muswellbrook and Upper Hunter LEPs Zones B2, B5, IN1, SP2, R2, R5, RE1, RE2 and W1
 - Muswellbrook Shire Council
 - Mount Pleasant Controlled
 - Bengalla Controlled
 - Privately Owned Land
 - Noise Assessment Group (NAG)
 - Default NAG Noise Criteria for Day/Evening/Night

- Mine-owned Dwelling
- Privately-owned Residence - MPO Acquisition on Request
- Privately-owned Residence - MPO Mitigation on Request
- Other Privately-owned Residence

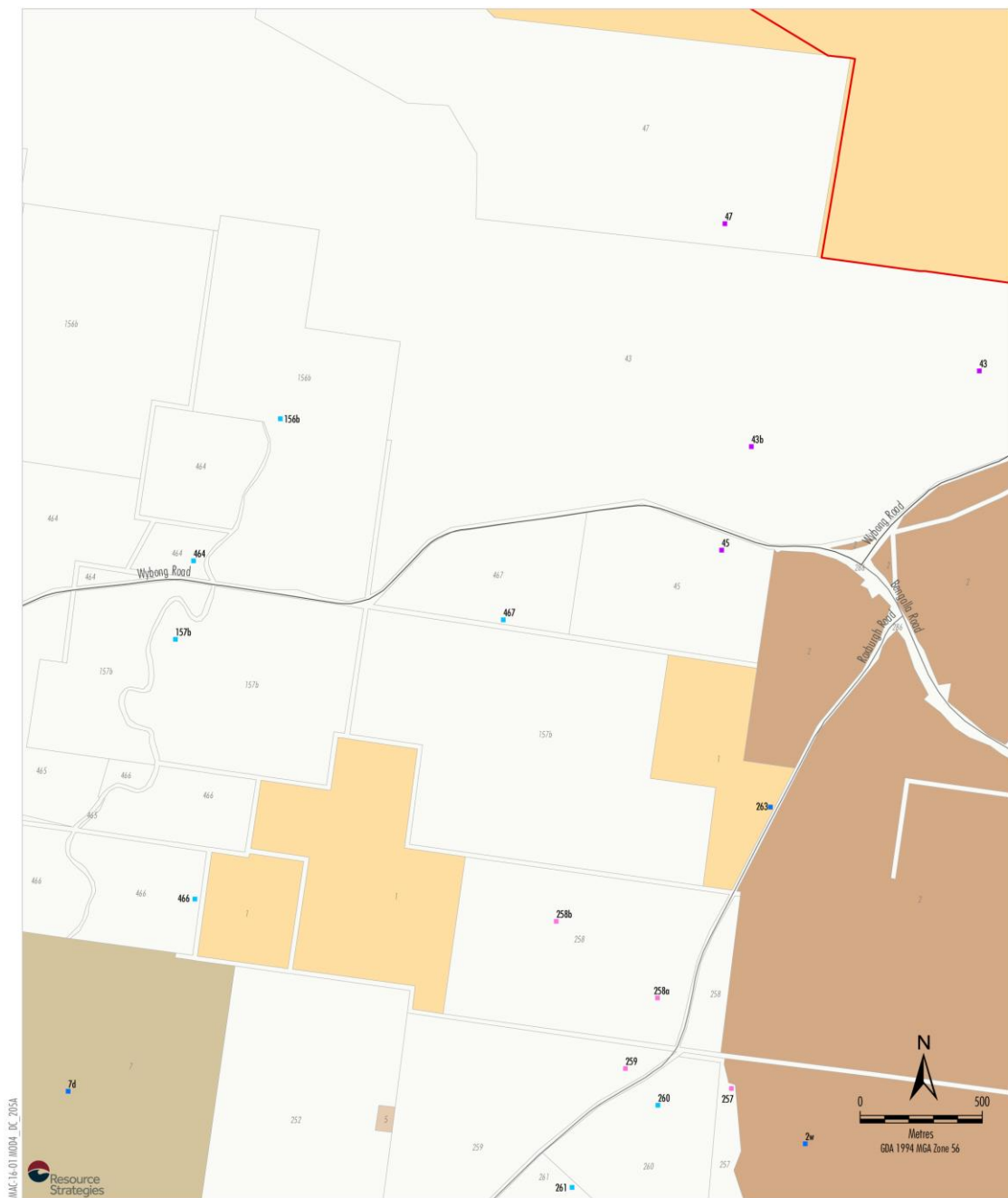
Source: NSW Land & Property Information (2016); NSW Division of Resources & Energy (2016); MACH Energy (2016)

MACHEnergy
MOUNT PLEASANT OPERATION
Land Ownership
Kayuga Road Inset

Figure 5-5



MACHEnergy
MOUNT PLEASANT OPERATION
Land Ownership
Denman Road Inset



- LEGEND**
- Mining Lease Boundary
 - Mount Pleasant Controlled
 - Bengalla Controlled
 - Mt Arthur Controlled
 - Other Mining/Resource Company Controlled
 - Privately Owned Land
-
- Noise Assessment Group (NAG)
 - 37/36/35 Default NAG Noise Criteria for Day/Evening/Night

- Mine-owned Dwelling
- Privately-owned Residence - MPO Acquisition on Request
- Privately-owned Residence - MPO Mitigation on Request
- Other Privately-owned Residence

Source: NSW Land & Property Information (2016); NSW Division of Resources & Energy (2016); MACH Energy (2016)

MACHEnergy
MOUNT PLEASANT OPERATION
Land Ownership
Wybong Road Inset

Figure 5-7