EPBC Act referral

Australian Government
Department of Agriculture, Water and the Environment

Note: PDF may contain fields not relevant to your application. These fields will appear blank or unticked. Please disregard these fields.

Title of proposal	2020/8735 - Mount Pleasant Optimisation Project

Section 1

Summary of your proposed action

1.1 Project industry type Mining

1.2 Provide a detailed description of the proposed action, including all proposed activities

Background

The Mount Pleasant Operation comprises an operating open cut coal mine and associated coal processing, rail spur and product coal loading infrastructure located approximately three kilometres (km) north-west of Muswellbrook in the Upper Hunter Valley of New South Wales (NSW) (Figures 1 and 2).

MACH Mount Pleasant Operations Pty Ltd manages the Mount Pleasant Operation as agent for and on behalf of the unincorporated Mount Pleasant Joint Venture between MACH Energy Australia Pty Ltd (MACH Energy) (95% owner) and J.C. D. Australia Pty Ltd (5% owner).

The Mount Pleasant Project was previously referred under the Commonwealth Environment Protection and Biodiversity Conservation Act, 1999 (EPBC Act) in 2011 and determined to be “a controlled action” (EPBC 2011/5795). Approval of the Mount Pleasant Project was granted under the EPBC Act in 2012 (Figure 2). Since 2012, minor additional surface development has been assessed and approved under the NSW Environmental Planning and Assessment Act, 1979 (EP&A Act) via Development Consent (DA 92/97) (Figure 2).

The Mount Pleasant Operation currently extracts coal within Mining Leases (MLs) 1645, 1709 and 1750 using open cut mining methods (i.e. truck and excavator operations) at a rate of up to 10.5 million tonnes per annum (Mtpa) of run-of-mine (ROM) coal. The mine includes a Coal Handling and Preparation Plant (CHPP), a rail loop and spur, conveyor and load out facility connecting the mine to the Muswellbrook–Ulan Rail Line. Transport of product coal is undertaken by rail to the Port of Newcastle for export, or to domestic customers for use in electricity generation.

Other components of the Mount Pleasant Operation include:

- workshops, electricity distribution and ancillary infrastructure;
- an average operational workforce of approximately 330 people;
- infrastructure relocations to facilitate mining (e.g. local roads, powerlines and water pipelines);
- construction and operation of water management and water storage infrastructure;
- development of an integrated waste rock emplacement landform;
- disposal of CHPP rejects in a fines emplacement area or as part of ROM waste emplacement activities in the waste rock emplacement landform;
- ongoing exploration activities; and
- other associated infrastructure, plant, equipment and activities.

The Mount Pleasant Joint Venture is seeking approval from the NSW Minister for Planning or the NSW Independent Planning Commission for a new Development Consent under the EP&A Act for the Mount Pleasant Optimisation Project.

Referral

This referral is for new components of the Mount Pleasant Optimisation Project (the Action) (Figure 3), which are not already authorised by the EPBC Act Approval (EPBC 2011/5795) or the Development Consent (DA 92/97). The Action is separate from, but related to, the controlled action approved under the EPBC Act Approval (EPBC 2011/5795). The Action does not include the components and operations of the Mount Pleasant Project approved under the EPBC Act Approval (EPBC 2011/5795) or Development Consent (DA 92/97), whether or not those components or operations have been constructed or commenced, and whether or not components of the Mount Pleasant Optimisation Project are to be carried out, or occur within, the approved area of the Mount Pleasant Project.

The Action therefore excludes the continuation of mining operations and associated activities that are currently authorised by existing approvals, such as EPBC 2011/5795 and Development Consent (DA 92/97).

The Action would include the following activities:

- realignment of the approved Northern Link Road to a suitable design standard to compensate for the approved closure of part of Castlerock Road (the approved Western Link Road would no longer be constructed);
- increased open cut coal extraction within the approved Mount Pleasant Project (EPBC 2011/5795) development area, including accessing deeper coal reserves in North Pit;
- staged increase in the extraction, handling and processing of ROM coal up to 21 Mtpa (i.e. progressive increase in ROM coal mining rate from 10.5 Mtpa over the Project life); and
- continued use of the controlled release dam and associated infrastructure that was approved through Bengalla Mine State and Federal approvals.

Under the proposed Action, mining operations at the higher production rate would extend to 22 December 2048, and the Mount Pleasant Operation would provide significant employment benefits, with an estimated average operational workforce of approximately 600 people, and an estimated peak of approximately 830 people.

Two alternative alignments of the western section of the realigned Northern Link Road are considered in this Referral. Option 1 is the currently preferred option as it skirts the ML boundary and would have a disturbance area of approximately 29.3 hectares (ha). Option 2 is the less preferred option and would have a disturbance area of approximately 23.8 ha. Only one of these options would be developed, with the final alignment to be selected based on detailed engineering design and any associated land access constraints.

The Mount Pleasant Joint Venture will need to carry out the already approved Mount Pleasant Project throughout the period in which the referral is lodged and no final decision is in operation under Part 9 of the EPBC Act in relation to the Action. The Mount Pleasant Joint Venture is conscious of s74AA of the EPBC Act and this is the reason why it is critical that the components of the Mount Pleasant Optimisation Project which are already authorised by the EPBC Act Approval (EPBC 2011/5795) or Development Consent (DA 92/97) are carved out of the Action (Figures 2 and 3).

1.3 What is the extent and location of your proposed action?

See Appendix B

1.5 Provide a brief physical description of the property on which the proposed action will take place and the location of the proposed action (e.g. proximity to major towns, or for off-shore actions, shortest distance to mainland)

The Action is located around 3km north-west of Muswellbrook in the Upper Hunter Valley of NSW (Figures 1/2).The Action is located in a mining precinct in the Muswellbrook Local Government Area. Bengalla Mine is located immediately to the south, and Dartbrook Mine is located immediately to the north (Figure 1). The Action would occur within the Optimisation Project Area Outline of approximately 5,340ha (Figure 3), which largely coincides with the extent of the approved Mount Pleasant Project Area Outline under approval EPBC 2011/5795 (Figure 2).The properties associated with the Action are characterised by a combination of approved mining activities, mining related infrastructure, public roads, private and public railway lines, remnant vegetation and cleared grazing land.

Additional Surface Development

The realignment of the Northern Link Road is located predominantly across paddocks used for grazing, and portions of the existing road reserves of Castlerock and Dorset Roads.

1.6 What is the size of the proposed action area development footprint (or work area) including disturbance footprint and avoidance footprint (if relevant)?

The Action would largely involve extension and augmentation of mining activities within the approved development footprint of the existing Mount Pleasant Project (EPBC 2011/5795)(Figures 2 and 3). *Additional Surface Development* Within the Action area, some additional surface infrastructure (i.e. the relocated Northern Link Road) would be required, necessitating limited clearing of additional native vegetation outside of the approved development footprint of the existing Mount Pleasant Project (EPBC 2011/5795). It is estimated, subject to detailed engineering design, that up to approximately 29.3ha (Option 1) or 23.8ha (Option 2) of land would be cleared for realignment of the Northern Link Road. As some of the existing development footprint associated with the approved Northern and Western Link Road alignments under EPBC 2011/5795 would no longer be required, the net additional clearance for the Action has been estimated at approximately 13ha (Option 1) or 7.5ha (Option 2).

1.7 Proposed action location

Address - 1100 Wybong Road, Muswellbrook, NSW, 2333, Australia

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1.8 Primary jurisdiction	New South Wales	

1.9 Has the person proposing to take the action received any Australian Government grant funding to undertake this project?

☐ Yes ☑ No

1.10 Is the proposed action subject to local government planning approval?

☐ Yes ☑ No

1.11 Provide an estimated start and estimated end date for the proposed action	Start Date	01/01/2022
	End Date	22/12/2048

1.12 Provide details of the context, planning framework and state and/or local Government requirements

NSW Environmental Planning and Assessment Act, 1979

The NSW EP&A Act and the NSW Environmental Planning and Assessment Regulation, 2000 (EP&A Regulation) set the framework for planning and environmental assessment in NSW.

The Mount Pleasant Joint Venture is seeking approval from the NSW Minister for Planning or the NSW Independent Planning Commission for a new Development Consent under the EP&A Act for the Mount Pleasant Optimisation Project. The Action is a subset of the activities proposed for the Mount Pleasant Optimisation Project.

The Mount Pleasant Joint Venture has lodged a Mount Pleasant Optimisation Project Scoping Report that provided a description of the Mount Pleasant Optimisation Project (SSD-10418) for key State regulatory agencies. The NSW Government has also issued the Secretary's Environmental Assessment Requirements (SEARs) for the Optimisation Project Environmental Impact Statement (EIS) in accordance with clause 3 of Schedule 2 of the EP&A Regulation.

Other Leases, Licences and Approvals

Relevant leases, licences or approvals required under other NSW legislation would also be varied and/or obtained for the Action as required.

Under the NSW Mining Act, 1992, environmental protection and rehabilitation are regulated by conditions included in all mining leases, including requirements for a Mining Operations Plan and submission of Annual Reviews.

1.13 Describe any public consultation that has been, is being or will be undertaken, including with Indigenous stakeholders

MACH Energy, on behalf of the Mount Pleasant Joint Venture, engages regularly with the community through the following mechanisms:

- a dedicated website (https://machenergyaustralia.com.au/);
- Community Consultative Committee quarterly meetings;
- maintenance of a community hotline; and
- community newsletters.

Consultation to date in relation to the Action has included:

- Conceptual Project Development Plan meeting with representatives of the NSW Division of Resources and Geoscience (DRG) (within the NSW Department of Planning, Industry and Environment [DPIE]) in October 2019.
- Project scoping and status meetings with representatives of the NSW DPIE in October 2019 and June 2020.
- A project briefing with representatives of the NSW Environment Protection Authority on 30 October 2019.
- Conducting social (scoping stage) community engagement in October and November 2019, including consultation with the Mount Pleasant Aboriginal Community Development Fund, Wonnarua Nation Aboriginal Corporation and Wanaruah Aboriginal Land Council.
- Project briefings with Muswellbrook Shire Council and Upper Hunter Shire Council.
- Project briefings with various Federal, State and Local government elected representatives.
- Ongoing consultation with surrounding mining companies.

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The EIS would also be supported by a Social Impact Assessment (SIA) prepared in accordance with the SIA Guideline (NSW Government, 2017). A community and stakeholder engagement program would support both the EIS and SIA processes. Key objectives of this program are to:

- engage with Project stakeholders about the progress and nature of the Mount Pleasant Optimisation Project;
- recognise and respond to local interests or concerns regarding the Mount Pleasant Optimisation Project; and
- continue the ongoing dialogue between MACH Energy and local landholders and neighbours.

The EIS engagement program will include the use of a variety of consultation mechanisms, such as:

- public availability of key documents;
- existing community information sharing mechanisms;
- SIA engagement activities;
- consultation with the Aboriginal community in accordance with the requirements of the Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010 (NSW Department of Environment, Climate Change and Water, 2010); and
- meetings with government agencies and other stakeholders.

The issues raised and outcomes of the community and stakeholder engagement program would be reported in the EIS and SIA.

1.14 Describe any environmental impact assessments that have been or will be carried out under Commonwealth, State or Territory legislation including relevant impacts of the project

The Mount Pleasant Joint Venture has lodged a Mount Pleasant Optimisation Project Scoping Report that provided a description of the Mount Pleasant Optimisation Project (SSD-10418) for key State regulatory agencies, and the NSW Government has issued the SEARs that identify the matters that need to be addressed in the EIS.

The Mount Pleasant Optimisation Project Scoping Report and associated SEARs have been made publicly available by the NSW DPIE on its website.

1.15 Is this action part of a staged development (or a component of a larger project)?

☐ Yes ☑ No

1.16 Is the proposed action related to other actions or proposals in the region?

☑ Yes ☐ No

1.16.1 Identify the nature/scope and location of the related action (Including under the relevant legislation)

As detailed in response to 1.2 above, the Action is separate from, but related to, the controlled action approved under the EPBC Act Approval (EPBC 2011/5795), namely the Mount Pleasant Project. The Mount Pleasant Project was previously referred under the EPBC Act in 2011 and determined to be “a controlled action” (EPBC 2011/5795). Approval of the Mount Pleasant Project was granted under the EPBC Act in 2012 and extends to October 2035.

The Action is also separate from, but related to, the Continuation of Bengalla Mine, a controlled action approved under the EPBC Act Approval (EPBC 2012/6378). The Continuation of Bengalla Mine was previously referred under the EPBC Act in 2012 and determined to be “a controlled action” (EPBC 2012/6378).

The Continuation of Bengalla Mine includes some infrastructure elements used by the Mount Pleasant Operation. Approval of the Continuation of Bengalla Mine was granted under the EPBC Act in 2015.

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Section 2

Matters of national environmental significance

2.1 Is the proposed action likely to have any direct or indirect impact on the values of any World Heritage properties?

☐ Yes ☑ No

2.2 Is the proposed action likely to have any direct or indirect impact on the values of any National Heritage places?

☐ Yes ☑ No

2.3 Is the proposed action likely to have any direct or indirect impact on the ecological character of a Ramsar wetland?

☐ Yes ☑ No

2.4 Is the proposed action likely to have any direct or indirect impact on the members of any listed species or any threatened ecological community, or their habitat?

☑ Yes ☐ No

Species or threatened ecological community

Austral Toadflax (Thesium australe), Euphrasia arguta; Prasophyllum sp. Wybong; and Illawarra Greenhood (Pterostylis gibbosa).

Impact

The Action is not likely to adversely or significantly impact these species.

The vegetation types that occur within the Action area (i.e. Plant Community Types [PCTs] 483, 618, 1605 and 1606 [Figure 4]) are not recognised as potential habitat for any of these threatened flora species (DPIE, 2020b). These species were not recorded during recent surveys undertaken by Hunter Eco (in prep), nor have they been recorded by any previous surveys in the Action area or surrounds.

Species or threatened ecological community

Pink-tailed Legless Lizard (Aprasia parapulchella); Australasian Bittern (Botaurus poiciloptilus); Australian Painted Snipe (Rostratula australis); Curlew Sandpiper (Calidris ferruginea); Red Goshawk (Erythrotriorchis radiatus); Painted Honeyeater (Grantiella picta); Swift Parrot (Lathamus discolor); Booroolong Frog (Litoria booroolongensis); Eastern Curlew (Numenius madagascariensis); Corben's Long-eared Bat (Nyctophilus corbeni); Brush-tailed Rock-wallaby (Petrogale penicillata).

Impact

The Action is not likely to adversely or significantly impact these species.

The proposed road realignment contains no potential habitat for the Pink-tailed Legless Lizard (i.e. rocky habitat), no potential habitat for the Booroolong Frog (streams), no potential habitat for Brush-tailed Rock-wallaby (rocky outcrops). It also contains no wetland habitat suitable for the Australasian Bittern, Australian Painted Snipe, Curlew Sandpiper and Eastern Curlew.

It is unlikely that the woodland within the re-aligned road options provides habitat for the Red Goshawk, Painted Honeyeater, Swift Parrot and Corben's Long-eared Bat because these species were not recorded during recent surveys undertaken by Future Ecology (in prep), nor have they been recorded by any previous surveys in the Action area or surrounds (Cumberland Ecology [2010], Eco Logical Australia [ELA] [2017a and b]).

The re-aligned road options would result in less clearance of woodland, approximately 5.4 ha (Option 1) or 5.5 ha (Option 2), compared to the original road re-alignment approved by EPBC 2011/5795 (approximately 6.1 ha).

Species or threatened ecological community

Striped Legless Lizard (Delma impar)

Impact

The Action is not likely to adversely or significantly impact this species.

This species was not recorded within the Action area during targeted surveys undertaken in 2018 and 2019 by Future Ecology (in prep), however it was recorded approximately 3 km to the south-east and 6 km to the south-west (Figure 5).

PCTs 483, 618, 1605 and 1606 in woodland and derived grassland forms within the Action area are recognised as potential habitat for the Striped Legless Lizard (DPIE, 2020b) (Figure 4). Given its presence in the surrounds, it is possible that the Striped Legless Lizard utilises potential habitat within the Action area. However, much of the habitat within the Action area is generally poor and subject to ongoing disturbance from grazing and other agricultural practices (Future Ecology, in prep).

The re-aligned road options would result in less clearance of woodland, approximately 5.4 ha (Option 1) or 5.5 ha (Option 2), compared to the original road re-alignment approved by EPBC 2011/5795 (approximately 6.1 ha). However, would result in slightly more derived grassland compared to the original road re-alignment approved by EPBC 2011/5795. Approximately 25.2 ha (Option 1) or 21.7 ha (Option 2) of potential habitat would be cleared for the Action compared to the original road re-alignment approved by EPBC 2011/5795 (approximately 15.9 ha).

The Action is not likely to significantly impact the Striped Legless Lizard, considering the EPBC Act Referral Guidelines for the Vulnerable Striped Legless Lizard, Delma impar (Department of Sustainability, Environment, Water, Population and Communities, 2011), given that the Action is not likely to impact on an important population of Striped Legless Lizard or the species as a whole.

Species or threatened ecological community

White-throated Needletail (Hirundapus caudacutus)

Impact

The Action is not likely to adversely or significantly impact this species.

This species was not recorded within the Action area or surrounds during targeted diurnal bird surveys undertaken by Future Ecology in 2018 and 2019 (in prep). The White-throated Needletail has previously been recorded flying over the ML by ELA in 2017.

The White-throated Needletail is a migratory species that is widespread in eastern and south-eastern Australia. In Australia, the White-throated Needletail is almost exclusively aerial (Department of Agriculture, Water and the Environment [DAWE], 2020b). This species does not breed in Australia (DAWE, 2020b).

The only known current threat to the White-throated Needletail in Australia is collision with wind turbines and overhead wires (Threatened Species Scientific Committee, 2019). This is not a relevant threat from the Project.

The Action is not likely to significantly or adversely impact the White-throated Needletail, for the reasons above.

Species or threatened ecological community

Regent Honeyeater (Anthochaera phrygia)

Impact

The Action is not likely to adversely or significantly impact this species.

This species was not recorded within the Action area or surrounds during targeted searches undertaken by Future Ecology in 2018 and 2019 (in prep), nor has it been recorded by any previous surveys in the Action area or surrounds (Cumberland Ecology [2010], ELA [2017a and b]). The closest database record is approximately 9 km to the south of the Action area (Figure 4).

No known or potential breeding habitat for the Regent Honeyeater occurs in the Action area and NSW DPIE (2020) do not recognise the location as a Mapped Important Area.

The re-aligned road options would result in less clearance of potential foraging habitat for this species, compared to the original road re-alignment approved by EPBC 2011/5795. Approximately 5.4 ha (Option 1) or 5.5 ha (Option 2) of potential foraging habitat would be cleared for the Action compared to the original road re-alignment approved by EPBC 2011/5795 (approximately 6.1 ha).

The Regent Honeyeater is unlikely to be adversely or significantly impacted by the Action given no known breeding or foraging habitat would be impacted and the potential foraging habitat to be cleared is a relatively small area compared to the similar potential foraging habitat across the wider locality.

Species or threatened ecological community

Koala (Phascolarctos cinereus)

Impact

The Action is not likely to adversely or significantly impact this species.

This species was not recorded within the Action area or surrounds during targeted call-playback, spotlighting and camera trapping surveys, scat searches and habitat assessments undertaken in 2018 and 2019 by Future Ecology (in prep). It has not been recorded by any previous surveys in the Action area or surrounds. Database records show the Koala has been previously recorded approximately 9 km (and further) to the south-east of the Action area (DPIE, 2020a).

Of the vegetation types that occur within the Action area, only PCT 1606 in its woodland form is recognised as potential habitat for the Koala (DPIE, 2020b).

The re-aligned road options would result in less clearance of potential habitat for this species, compared to the original road re-alignment approved by EPBC 2011/5795. Approximately 0.2 ha (Option 1 or Option 2) of potential habitat (plus paddock trees within PCT 1606 derived grassland that may potentially be utilised by the Koala) would be cleared for the Action compared to the original road re-alignment approved by EPBC 2011/5795 (approximately 0.3 ha).

The Koala is unlikely to be adversely or significantly impacted by the Action, considering the EPBC Act Referral Guidelines for the Vulnerable Koala (Department of the Environment [DotE], 2014), given that:

(a) no habitat critical to the survival of the koala would be cleared; and
(b) the action is not likely to interfere substantially with the recovery of the koala through the introduction or exacerbation of key threats in areas of habitat critical to the survival of the koala.

Species or threatened ecological community

Spotted-tailed Quoll (Dasyurus maculatus)

Impact

The Action is not likely to adversely or significantly impact this species.

This species was not recorded within the Action area or surrounds during targeted hair tube, camera trapping and spotlighting surveys and habitat assessments undertaken by Future Ecology in 2018 and 2019 (in prep). It has not been recorded by any previous surveys in the Action area or surrounds. The nearest database records for this species are located approximately 5 km and 9 km to the south-east of the Action area (DPIE, 2020a) (Figure 5).

The re-aligned road options would result in less clearance of potential habitat for this species, compared to the original road re-alignment approved by EPBC 2011/5795. Approximately 2.7 ha (Option 1) or 2.4 ha (Option 2) of potential habitat would be cleared for the Action compared to the original road re-alignment approved by EPBC 2011/5795 (approximately 2.8 ha).

The Spotted-tailed Quoll is unlikely to be adversely or significantly impacted by the Action given that:

(a) this species has not been recorded within the Action area; and
(b) the limited potential habitat within the Action area which is relatively common in the immediate surrounds and across the wider locality (as indicated by the numerous records of this species within the extent of surrounding towns and nature

reserves, national parks and state forests [DPIE, 2020a]).

Species or threatened ecological community

Grey-headed Flying-fox (Pteropus poliocephalus)

Impact

The Action is not likely to adversely or significantly impact this species.

No breeding camps are known to occur within the Action area or immediate surrounds (DotE, 2020) and none were found during recent daytime searches and habitat assessments, therefore breeding habitat is absent from the Action area (Future Ecology, in prep).

This species was recorded at eight locations within the ML and surrounds during targeted surveys undertaken by Future Ecology in 2018 and 2019 (in prep) (Figure 5).

The re-aligned road options would result in less clearance of potential foraging habitat for this species, compared to the original road re-alignment approved by EPBC 2011/5795. Approximately 5.4 ha (Option 1) or 5.5 ha (Option 2) of potential foraging habitat would be cleared for the Action compared to the original road re-alignment approved by EPBC 2011/5795 (approximately 5.7 ha).

The Action is not likely to significantly adversely impact the Grey-headed Flying-fox, given that:

(a) no potential breeding habitat has been recorded (Future Ecology, in prep) or is known to occur within the Action area or surrounds (DotE, 2020); and
(b) potential foraging habitat for this species is relatively common across the wider locality (as indicated by the numerous records of this species within the extent of surrounding towns and state forests [DPIE, 2020a]).

Species or threatened ecological community

Large-eared Pied Bat (Chalinolobus dwyeri)

Impact

The Action is not likely to adversely or significantly impact this species.

No known or potential breeding habitat for the Large-eared Pied Bat occurs in the Action area or surrounds.

This species was recorded with a ‘probable’ confidence level via acoustic recording to the south of the Action area, however was not trapped during targeted harp trap and mistnet surveys undertaken by Future Ecology in 2018 and 2019 (in prep). It has not been recorded by any previous surveys in the Action area or surrounds (Cumberland Ecology [2010], ELA [2017a and b]).

The re-aligned road options would result in less clearance of potential foraging habitat for this species, compared to the original road re-alignment approved by EPBC 2011/5795. Approximately 0.6 ha (Option 1) or 0.4 ha (Option 2) of potential foraging habitat would be cleared for the Action compared to the original road re-alignment approved by EPBC 2011/5795 (approximately 0.9 ha).

The Large-eared Pied Bat is unlikely to be adversely or significantly impacted by the Action given no known breeding habitat would be impacted and the potential foraging habitat to be cleared is a relatively small area compared to the similar potential foraging habitat across the wider locality.

Species or threatened ecological community

Central Hunter Valley Eucalypt Forest and Woodland

Impact

The Action is not likely to significantly impact this ecological community. The Central Hunter Valley Eucalypt Forest and Woodland critically endangered ecological community (CEEC) is not present within the Action area (Hunter Eco, in prep) (Figure 4).

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The re-aligned road options would result in less clearance of Central Hunter Valley Eucalypt Forest and Woodland CEEC, compared to the original road re-alignment approved by EPBC 2011/5795, as it is not present in either Option 1 or Option 2. The original road re-alignment approved by EPBC 2011/5795 would have resulted in the clearance of approximately 0.7 ha.

Species or threatened ecological community

Hunter Valley Weeping Myall (Acacia pendula) Woodland

Impact

The Action is not likely to adversely or significantly impact this ecological community. Weeping Myall (Acacia pendula) is not present in the Action area or surrounds (DPIE, 2020a; Hunter Eco, in prep) and therefore this ecological community is not present.

Species or threatened ecological community

White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland

Impact

The Action is not likely to significantly impact this ecological community.

The White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland CEEC is present within the Action area (Hunter Eco, in prep) (Figure 4).

Option 1 of the Action would clear approximately 19.4 ha of derived grassland and 5 ha of woodland (total of 24.4 ha). Option 2 of the Action would clear approximately 15.8 ha of derived grassland and 5.2 ha of woodland (total of 21 ha). The original road re-alignment approved by EPBC 2011/5795 would have resulted in the clearance of approximately 8.7 ha of derived grassland and 5.1 ha of woodland (total of 13.8 ha). Hence, the net difference is approximately +10.7 ha of derived grassland and -0.1 ha of woodland (total of 10.6 ha) for Option 1 and approximately +7.1 ha of derived grassland and +0.1 ha of woodland (total of 7.2 ha) for Option 2.

The Action is not likely to adversely or significantly impact this ecological community, given that the Action would be managed so as to not cause a reduction in the quality or integrity of White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland CEEC surrounding the Action area to the extent that there would be significant residual impacts to this community.

2.4.2 Do you consider this impact to be significant?

☐ Yes ☑ No

2.5 Is the proposed action likely to have any direct or indirect impact on the members of any listed migratory species or their habitat?

☐ Yes ☑ No

2.6 Is the proposed action to be undertaken in a marine environment (outside Commonwealth marine areas)?

☐ Yes ☑ No

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2.7 Is the proposed action likely to be taken on or near Commonwealth land?

☐ Yes ☑ No

2.8 Is the proposed action taking place in the Great Barrier Reef Marine Park?

☐ Yes ☑ No

2.9 Is the proposed action likely to have any direct or indirect impact on a water resource from coal seam gas or large coal mining development?

☑ Yes ☐ No

Water resource

Groundwater

Impact

Groundwater Systems The two main groundwater systems identified in the vicinity of the Action are alluvium associated with the Hunter River and Sandy Creek, and Permian strata that host the coal measures (Figure 6). The Action coal resource is wholly located within the Sydney Basin-North Coast Groundwater Source, regulated under the Water Sharing Plan for the North Coast Fractured and Porous Rock Groundwater Sources, 2016 (Figure 7). The coal seams are recognised as the main aquifer zones within the hard rock groundwater system, providing storage and transmission within cleats and joints. The interburden zones act as aquitards, effectively impeding or constraining the vertical exchange of groundwaters. Higher aquifer pressures within the coal measures and a regional gradient towards the alluvium result in pressure driving groundwater movement towards the Hunter River. Alluvial sediments associated with the Hunter River and Sandy Creek are located to the east and west of the Action, respectively (Figure 6). Alluvial sediments associated with the Hunter River are regulated under the Water Sharing Plan for the Hunter Regulated River Water Source, 2016 and the Water Sharing Plan for the Hunter Unregulated and Alluvial Water Sources, 2009 (Figure 7). Alluvial sediments associated with Sandy Creek fall within the Muswellbrook Water Source, which is regulated under the Water Sharing Plan for the Hunter Unregulated and Alluvial Water Sources, 2009 (Figure 7). The Hunter River alluvium is the most productive aquifer in the region. DPIE – Water has classified the alluvium associated with the Hunter River, including along Sandy Creek and Dart Brook as 'highly productive', although in-reality yields and water quality can vary significantly. Recharge to the groundwater systems occurs from rainfall and runoff infiltration, lateral groundwater flow and some leakage from surface water sources (e.g. regulated flows in the Hunter River) (Australasian Groundwater and Environmental Consultants [AGE], in prep). Groundwater discharge occurs via evapotranspiration from shallow water tables, groundwater pumping (primarily for irrigation and potable water supply) and minor short duration baseflow events after significant rainfall (AGE, in prep). Salinity is a key constraint to water management and groundwater use and can be described by electrical conductivity (EC). Baseline groundwater salinity has been analysed by AGE (in prep). In summary, groundwater quality within and surrounding the Mount Pleasant Operation is highly variable but generally poor. *Groundwater Dependent Ecosystems (GDEs)* There are no 'high priority GDEs' (as defined in the relevant water sharing plans) in the vicinity of the Action. The Groundwater Dependent Ecosystem Atlas (GDE Atlas) was developed by the BoM as a national dataset of Australian GDEs to inform groundwater planning and management (BoM, 2019). The GDE Atlas identifies the following potential aquatic and terrestrial GDEs in the vicinity of the Action: • Aquatic habitat within the Hunter River is mapped as having high potential for groundwater interaction. • Terrestrial vegetation along the Hunter River is mapped as having high potential for groundwater interaction. • The remaining terrestrial vegetation in the vicinity of the Action is mapped as having low potential for groundwater interaction (noting that remnant vegetation is unlikely to be groundwater dependent given the significant depth to groundwater in this area). *Impact Assessment* It is predicted that the incremental impacts from the Action on groundwater resources and any GDEs associated with the Hunter River would be negligible. In the context of the existing/approved cumulative effects of the approved Mount Pleasant Project and the adjoining Dartbrook and Bengalla Mines, it is not anticipated that increasing the rate of coal extraction or lowering part of the Mount Pleasant open cut floor to match the rest of the approved mine would result in any significant additional incremental impacts on the value of water resources for third parties (including the environment). The potential impacts from the Action on the hydrology and the water quality of water resource will be further assessed as part of the EIS process.*Groundwater Monitoring and Water Management Plan* Groundwater monitoring for the existing Mount Pleasant Operation is undertaken in accordance with the Groundwater Management Plan (GWMP) within the approved Water Management Plan (MACH Energy, 2019b). The groundwater monitoring network currently consists of more than 45 sites, which cover all major hydrogeological units and are broadly distributed across the Action area (Figure 8). Groundwater level and quality monitoring would continue to be undertaken for the Action. Should unexpected impacts occur, the currently approved Water Management Plan (MACH Energy, 2019b) includes a process to deal with a complaint received in relation to loss of groundwater supply.

Water resource

Surface Water

Impact

The Action area is located in the Hunter river catchment, which has an overall size of 21,500 km2, and incorporates the

major towns of Newcastle, Singleton and Muswellbrook (MACH Energy, 2019b). The Hunter River is the main drainage feature within the catchment. It begins in the Mount Royal Range and flows adjacent to Muswellbrook and Singleton, before draining to the ocean at Newcastle. The Hunter River contains a number of significant tributaries, including the Goulburn, Pages and Isis Rivers, as well as the Middle, Dart, Stewart, Moonan and Ormadale Brooks. Alluvial floodplains ranging in width from 1.5–2 km border the river over the majority of its length. The eastern extent of the Action area is located directly adjacent to these floodplains.

There are a number of ephemeral drainage lines which traverse the Action area and drain into the Hunter River. The eastern portion of the Action area drains via Rosebrook Creek, as well as other unnamed drainages. Areas in the south and west of the Action area drain to Dry Creek and Sandy Creek, respectively, both of which are tributaries of the Hunter River. All other areas drain into unnamed drainage lines, which flow directly into the Hunter River. These drainage lines are ephemeral, generally flowing for short periods after significant rainfall events or protracted wet periods. Baseflow in these creeks are insignificant.

Under current catchment conditions (since the construction of Glenbawn Dam was completed in 1958), the Hunter River is perennial, with a minimum flow rate at Aberdeen of approximately 14 megalitres per day. The data recorded since 1988 indicates that flow in the Hunter River is fairly consistent immediately upstream and downstream of the Action area.

The potential impacts to Hunter River baseflow were considered as part of the Mt Pleasant Water Management studies (PPK Infrastructure and Environment, 1997) and it was concluded that a minor reversal in flow, resulting in downward leakage from the alluvium to the hard rock, would be offset by natural groundwater recharge. Accordingly, the water table within the alluvial sediments was predicted to remain largely unaffected by depressurisation and the impacts on Hunter River water supply were therefore predicted to be negligible.

Water quality monitoring has been undertaken since 2000 along Hunter River, Sandy Creek, Rosebrook Creek, Muscle Creek and other unnamed drainage lines, both upstream and downstream of the Mount Pleasant Operation (Figure 9) (MACH Energy, 2019b). Samples are taken monthly and/or during or immediately following rainfall event and analysed for EC, pH, total suspended solids, total dissolved solids, dissolved oxygen and metals (MACH Energy, 2019b). There has been no significant difference in water quality observed between monitoring sites upstream and downstream of the Mount Pleasant Operation since monitoring began. MACH would continue to implement the existing surface water management measures detailed in the approved Water Management Plan (MACH Energy, 2019b), including continued application of the Surface and Groundwater Response Plan as required.

Surrounding land uses in the vicinity of the Action primarily include agriculture, infrastructure and coal mining. As such, the catchment area in the vicinity of the Action has historically been significantly cleared and altered.

Impact Assessment

As is evident, when comparing Figure 2 and Figure 3, the Action would not materially increase the approved total disturbance footprint of the Mount Pleasant Project (EPBC 2011/5795) within the Hunter River or Sandy Creek catchments. Potential surface water impacts of the Action on the Hunter River and Sandy Creek and ephemeral tributaries would therefore be similar to those already experienced and/or predicted at the approved Mount Pleasant Project.

The Mount Pleasant Operation would continue to source raw water from the Hunter River in support of mining operations, with any extraction licenced under the Water Sharing Plan for the Hunter Regulated River Water Source, 2016. River flows in this system are highly regulated by the NSW Government (Water NSW) operation of major dams.

The Mount Pleasant Operation would also continue to release water to the Hunter River via controlled discharges in accordance with the MACH Environment Protection Licence administered by the NSW EPA under the Hunter River Salinity Trading Scheme.

Impacts of the Action on water resources will be further assessed as part of the EIS process.

Surface Water Monitoring and Water Management Plan

MACH would continue to implement the existing surface water monitoring program detailed in the approved Water Management Plan (MACH Energy, 2019b), including continued application of the Surface and Groundwater Response Plan as required.

2.9.2 Do you consider this impact to be significant?

☐ Yes ☑ No

Note: PDF may contain fields not relevant to your application. These fields will appear blank or unticked. Please disregard these fields.

2.10 Is the proposed action a nuclear action?

☐ Yes ☑ No

2.11 Is the proposed action to be taken by a Commonwealth agency?

☐ Yes ☑ No

2.12 Is the proposed action to be undertaken in a Commonwealth Heritage place overseas?

☐ Yes ☑ No

2.13 Is the proposed action likely to have any direct or indirect impact on any part of the environment in the Commonwealth marine area?

☐ Yes ☑ No

Note: PDF may contain fields not relevant to your application. These fields will appear blank or unticked. Please disregard these fields.

Section 3

Description of the project area

3.1 Describe the flora and fauna relevant to the project area

As discussed in Section 2.4.1, the estimate of additional disturbance associated with the Action realignment of the Northern Link Road would be minor relative to the approved Mount Pleasant Project (EPBC 2011/5795). Notwithstanding, flora surveys have been conducted within the Action area and surrounds by Hunter Eco (in prep). Survey techniques included full floristic vegetation integrity plots, searches for listed threatened ecological communities and targeted searches for threatened species.

Fauna surveys and habitat assessments have been conducted within the Action area and surrounds by Future Ecology (in prep). Survey techniques consisted of active searches (including use of artificial tile grids and nestboxes), bird surveys, call playback, spotlighting, bat call detection, motion detection cameras, hairtubes and trapping (Elliott trapping, pitfall traps, harp traps and mistnets).

Threatened species and communities potentially impacted by the works to be undertaken within the Action area are summarised in Section 2.4.1.

Threatened ecological communities mapped within the Action area and surrounds outside the approved development footprint of the Mount Pleasant Project are shown on Figure 4. Figure 4 illustrates that the Action development area is minor relative to the approved development footprint under EPBC 2011/5795.

Vertebrate fauna species located within the Action area and surrounds include reptiles, birds (both migratory and non-migratory) and mammals (Future Ecology, in prep).

A number of introduced animal species have been recorded in the Action area and surrounds, including Fallow Deer (Dama dama), Cat (Felis catus), Brown Hare (Lepus capensis), House Mouse (Mus musculus), Rabbit (Oryctolagus cuniculus), Pig (Sus scrofa) and Fox (Vulpes vulpes) (Future Ecology, in prep).

Additional Surface Development

The realignment of the Northern Link Road predominantly consists of derived grassland. One threatened ecological community, no threatened flora species and no threatened fauna species have been recorded within the additional surface development area associated with the Action.

3.2 Describe the hydrology relevant to the project area (including water flows)

A number of ephemerally discharging first and second order named and unnamed watercourses traverse the Action area (Figure 9), which drain either west to Sandy Creek or east to the Hunter River. The Action area is located within the Hunter River catchment.

The main drainage feature is the Hunter River which flows in a southerly direction approximately 1 km to the east of the Action area. The eastern portion of the Action area drains via Rosebrook Creek, as well as other unnamed drainages. Areas in the south and west of the Action area drain to Dry Creek and Sandy Creek, respectively, both of which are tributaries of the Hunter River. All other areas drain into unnamed drainage lines, which flow directly into the Hunter River.

The Hunter River is located to the east of the Action area and has a total catchment area of approximately 21,500 km2 (MACH Energy, 2019b). The Hunter River flows in a south easterly direction and is regulated by releases from the Glenbawn Dam, which is approximately 20 km north-east of the Action area.

Additional Surface Development

In the vicinity of the additional disturbance associated with the realignment of the Northern Link Road, an ephemeral stream drains north east towards the Hunter River (Figure 9).

3.3 Describe the soil and vegetation characteristics relevant to the project area

Soils

The Action area is of Permian age, Sydney Basin Hunter Sequence, Singleton Supergroup with lithology of coal, claystone, siltstone, sandstone and tuff. The dominant Australian Soil Classification (Isbell, 2016) map shows the majority of the area to be Kurosols with some Vertosols in the north-west.

Vegetation

Hunter Eco (in prep) identified four PCTs that occur within the additional disturbance area associated with the Action (Figure 4). They include:

(a) PCT 483 – Grey Box x White Box grassy open woodland on basalt hills in the Merriwa region, upper Hunter Valley;
(b) PCT 618 – White Box x Grey Box – Red Gum – Rough-barked Apple grassy woodland on rich soils on hills in the upper Hunter Valley;
(c) PCT 1605 – Narrow-leaved Ironbark – Native Olive shrubby open forest of the central and upper Hunter; and
(d) PCT 1606 – White Box – Narrow-leaved Ironbark – Blakely's Red Gum shrubby open forest of the central and upper Hunter.

3.4 Describe any outstanding natural features and/or any other important or unique values relevant to the project area

There are no outstanding natural features within the Action area.

3.5 Describe the status of native vegetation relevant to the project area

Refer to Sections 3.1 and 3.3.

3.6 Describe the gradient (or depth range if action is to be taken in a marine area) relevant to the project area

The Action is located in the Sydney Basin Bioregion, Hunter sub-region. Landforms in the vicinity of the Mount Pleasant Operation are characterised by the broad floodplain of the Hunter River surrounded by the undulating foothills and ridges of the surrounding terrain, including more elevated areas within Muswellbrook. Elevations in the vicinity of the Mount Pleasant Operation range from approximately 360 m AHD at Mount Pleasant to approximately 140 m AHD at the existing Hunter River pump station.

Additional Surface Development

The additional surface development associated with the Action would be located on gently undulating land on the north-west boundary of the Mount Pleasant Operation ML 1645 (Figure 3).

3.7 Describe the current condition of the environment relevant to the project area

The Action area lies entirely within the Central Hunter Foothills landscape which is 75% cleared and is classified as an over-cleared landscape (Mitchell, 2002). Agricultural industries within the wider locality include cattle grazing, horse breeding and viticulture.

The Action area contains areas of remnant native vegetation, areas of derived native grassland, and areas of cleared land. Most woodland/forest patches are fragmented, show evidence of historic and ongoing disturbance from grazing and lack structural diversity in terms of subcanopy and understorey layers due to grazing pressure. Connectivity between woodland/forest patches is generally poor across the Action area.

Saffron Thistle (Carthamus lanatus) was abundant within the Action area, typical of the overgrazed grassland (Hunter Eco, in prep). This weed is not a priority weed species listed under the NSW Biosecurity Act, 2015 or a Weed of National Significance.

A number of feral animal species have also been recorded in the Action area and surrounds, including Fallow Deer, Cat, Brown Hare, House Mouse, Rabbit, Pig and Fox (Future Ecology, in prep).

Additional Surface Development

The additional surface development associated with the Action would be located on grazing land that comprises a combination of derived native grassland and woodland communities (Figure 4).

3.8 Describe any Commonwealth Heritage places or other places recognised as having heritage values relevant to the project

There are no Commonwealth Heritage Places within the Action area or its surrounds (DAWE, 2020a).

The Mount Pleasant area has been the subject of a number of historical and Aboriginal heritage assessments for the approved Mount Pleasant Operation. The earlier assessments will be augmented by a Historic Heritage Assessment and an Aboriginal Cultural Heritage Assessment as part of the Optimisation Project EIS preparation.

Note: PDF may contain fields not relevant to your application. These fields will appear blank or unticked. Please disregard these fields.

3.9 Describe any Indigenous heritage values relevant to the project area

The Action area has been subject to various Aboriginal cultural heritage assessments and surveys carried out as part of the existing approved Mount Pleasant Operation. The Mount Pleasant Operation operates in accordance with an approved Aboriginal Heritage Management Plan and associated Aboriginal Heritage Impact Permits (AHIPs).

The Action area largely lies within approved AHIP boundaries (i.e. AHIPs #C0002053, #C0002092 and #C0004783). The majority of the originally recorded Aboriginal heritage sites have been salvaged and/or impacted under the approved AHIPs (i.e. AHIPs #C0002053, #C0002092 and #C0004783).

Within the Action area open artefacts dominate the surface archaeological record, including open artefact scatters, isolated finds and potential archaeological deposits (MACH Energy, 2019a).

3.10 Describe the tenure of the action area (e.g. freehold, leasehold) relevant to the project area

Relevant tenure of parcels of land within the Action area and surrounds are shown on Figure 10.

3.11 Describe any existing or any proposed uses relevant to the project area

The Action is located within a recognised mining precinct in the Muswellbrook Local Government Area. Bengalla Mine is located immediately to the south, and Dartbrook Mine is located immediately to the north (Figure 1).

The properties associated with the Action are characterised by a combination of approved mining activities, mining related infrastructure, public roads, private and public railway lines, remnant vegetation and cleared grazing land. The Hunter River floodplain to the east of the open cut operations is subject to higher intensity agricultural activities.

Additional Surface Development

The proposed realignment of the Northern Link Road is located predominantly across paddocks used for grazing and the existing road reserves of Castlerock and Dorset Roads.

Note: PDF may contain fields not relevant to your application. These fields will appear blank or unticked. Please disregard these fields.

Section 4

Measures to avoid or reduce impacts

4.1 Describe the measures you will undertake to avoid or reduce impact from your proposed action

Potential impacts to threatened species and other Matters of National Environmental Significance (MNES) would be minimised and managed through the implementation of the measures described below.

Biodiversity

Potential impacts on biodiversity at the Mount Pleasant Operation are managed in accordance with an approved Biodiversity Management Plan. The management measures implemented at the existing operations would continue for the Action.

Any vegetation clearing for the Action would follow the protocol outlined in the existing Biodiversity Management Plan, which includes:

(a) Pre-clearing surveys being undertaken by a qualified ecologist to identify if any threatened species, populations or communities (or their habitat) are present.
(b) Determining appropriate paths for access tracks and other disturbance with the aim of least impact on environmental values where possible.
(c) Relocating or re-orientating proposed disturbance if threatened species, populations or communities or their habitat are identified. If the relocation or re-orientation of the area to be disturbed is not practicable (for reasons of mine / operational safety), a qualified ecologist will relocate any fauna species residing within the area to be cleared.

Additional Surface Development

The Optimisation Project will be assessed under the NSW Biodiversity Conservation Act, 2016 and a biodiversity offset will be provided as a means of reducing impacts, if required. This would include consideration of the potential disturbance of the proposed realignment of the Northern Link Road (Figure 4).

Water Management

The water management system at the existing approved Mount Pleasant Operation is comprised of a number of dams, the open cut and the Fines Emplacement Area, together with a system of pumped transfers and drains. The approved water management system at the Mount Pleasant Operation currently includes:

(a) sediment dams;
(b) mine water dams;
(c) clean water dams;
(d) discharge/storage dams;
(e) a number of drains, including multiple clean water diversion drains;
(f) Hunter River water pipeline and pump station; and
(g) other water transfer infrastructure (i.e. tanks, pumps and pipelines).

The main sources of water supply to the Mount Pleasant Operation are:

(a) groundwater inflows into the open cut mine void;
(b) runoff captured from the footprint of the mining disturbance area by the water management system;
(c) fine rejects bleed water captured from the Fines Emplacement Area; and
(d) water pumped from the Hunter River.

Subject to feasibility, excess mine water transfers can also occur from the adjoining Dartbrook Mine to the Mount Pleasant Operation, to reduce raw water extraction from the Hunter River.

Water management at the Mount Pleasant Operation is conducted in accordance with the Water Management Plan (MACH Energy, 2019b). Water management in the Action area would also be carried out in accordance with an approved Water Management Plan.

Rehabilitation

Surface disturbance associated with the development of the Northern Link Road would be progressively rehabilitated, where not within the relocated public road corridor. Soil resource management practices would involve the stripping and

stockpiling of soil resources prior to land disturbance associated with the Action. Soil resource management measures for infrastructure development such as the road realignment will be considered in the preparation of the Optimisation Project EIS.

4.2 For matters protected by the EPBC Act that may be affected by the proposed action, describe the proposed environmental outcomes to be achieved

An assessment of potential impacts associated with the Action (outlined in Section 2) indicates that it will not significantly impact any MNES and is therefore not considered to be a controlled action. Any residual impacts on MNES would be appropriately managed and/or mitigated through the implementation of relevant environmental plans or strategies to further minimise the impacts of the proposed Action.

Note: PDF may contain fields not relevant to your application. These fields will appear blank or unticked. Please disregard these fields.

Section 5

Conclusion on the likelihood of significant impacts

5.1 You indicated the below ticked items to be of significant impact and therefore you consider the action to be a controlled action

- ☐ World Heritage properties
- ☐ National Heritage places
- ☐ Wetlands of international importance (declared Ramsar wetlands)
- ☐ Listed threatened species or any threatened ecological community
- ☐ Listed migratory species
- ☐ Marine environment outside Commonwealth marine areas
- ☐ Protection of the environment from actions involving Commonwealth land
- ☐ Great Barrier Reef Marine Park
- ☐ A water resource, in relation to coal seam gas development and large coal mining development
- ☐ Protection of the environment from nuclear actions
- ☐ Protection of the environment from Commonwealth actions
- ☐ Commonwealth Heritage places overseas
- ☐ Commonwealth marine areas

5.2 If no significant matters are identified, provide the key reasons why you think the proposed action is not likely to have a significant impact on a matter protected under the EPBC Act and therefore not a controlled action

On the basis of the reasons provided in Section 2, the Action is not considered to be a controlled action as it is not likely to have a significant impact on:

(a) the World Heritage values of a declared World Heritage property;
(b) the National Heritage values of a National Heritage place;
(c) the ecological character of wetlands of international importance;
(d) a listed threatened species, community, or their habitat;
(e) a listed migratory species;
(f) the marine environment outside a Commonwealth marine area;
(g) the environment on Commonwealth land;
(h) the Great Barrier Reef Marine Park;
(i) a water resource, in relation to coal seam gas development and large coal mining development;
(j) the environment from nuclear action;
(k) the Commonwealth Heritage values of a Commonwealth Heritage place overseas; or
(l) the environment inside a Commonwealth marine area.

Note: PDF may contain fields not relevant to your application. These fields will appear blank or unticked. Please disregard these fields.

Section 6

Environmental record of the person proposing to take the action

6.1 Does the person taking the action have a satisfactory record of responsible environmental management? Explain in further detail

MACH Energy has a strong record in mine safety, environmental management and business operation. MACH Energy conducts its mining operations in accordance with a range of regulatory consents, leases and licenses. MACH Energy has established and is committed to continue open and constructive dialogue with the local community and stakeholders.

6.2 Provide details of any past or present proceedings under a Commonwealth, State or Territory law for the protection of the environment or the conservation and sustainable use of natural resources against either (a) the person proposing to take the action or, (b) if a permit has been applied for in relation to the action – the person making the application

N/A

6.3 If it is a corporation undertaking the action will the action be taken in accordance with the corporation's environmental policy and framework?

☑ Yes ☐ No

6.3.1 If the person taking the action is a corporation, provide details of the corporation's environmental policy and planning framework

MACH Energy has a documented Environmental policy that applies to the Mount Pleasant Operation, which states:

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.

6.4 Has the person taking the action previously referred an action under the EPBC Act, or been responsible for undertaking an action referred under the EPBC Act?

☑ Yes ☐ No

6.4.1 EPBC Act No and/or Name of Proposal

Mount Pleasant Project, Muswellbrook, NSW (EPBC 2011/5795).

Note: PDF may contain fields not relevant to your application. These fields will appear blank or unticked. Please disregard these fields.

Section 7

Information sources

Reference source

Australasian Groundwater and Environmental Consultants (in prep) Mount Pleasant Optimisation Project – Groundwater Impact Assessment. Prepared for MACH Energy Australia Pty Ltd.

Reliability

Analysis, modelling and impact assessment report.

Uncertainties

N/A

Reference source

Australian and New Zealand Environment and Conservation Council (ANZECC) & Agriculture and Resource Management Council of Australia and New Zealand (ARMCANZ) (2000) Australian and New Zealand Guidelines for Fresh and Marine Water Quality.

Reliability

Published guideline prepared as part of Australia's National Water Quality Management Strategy.

Uncertainties

N/A

Reference source

Bureau of Meteorology (2019) National Atlas of Groundwater Dependent Ecosystems.

Reliability

Well-known national dataset of Australian GDEs prepared by the Commonwealth Department of the Environment.

Uncertainties

N/A

Reference source

Cumberland Ecology (2010) Mount Pleasant Project Modification Ecological Assessment. Prepared for Coal & Allied Operations Pty Limited.

Reliability

Survey report.

Uncertainties

N/A

Reference source

Department of Agriculture, Water and the Environment (2020a) Environment Protection and Biodiversity Conservation Act, 1999 (EPBC Act) Protected Matters Search. Search Area: -32.21028 150.80667, -32.20889 150.86861. Data received: May 2020.

Reliability

Well-known database search suggested by the Commonwealth Department of the Environment and Energy to identify potentially occurring MNES.

Uncertainties

N/A

Note: PDF may contain fields not relevant to your application. These fields will appear blank or unticked. Please disregard these fields.

Reference source

Department of Agriculture, Water and the Environment (2020b) Species Profiles and Threats Database. Website: http://www.environment.gov.au/cgi-bin/sprat/public/sprat.pl. Accessed: December 2019.

Reliability

Reliable source of desktop information. Website of the Commonwealth Department of the Environment and Energy. Contains information on threatened species distribution, population, life cycle, threats and habitat requirement.

Uncertainties

N/A

Reference source

Department of Environment, Climate Change and Water (2010) Aboriginal cultural heritage consultation requirements for proponents 2010. Prepared by the State of New South Wales and Department of Environment, Climate Change and Water.

Reliability

Published guideline prepared as part of Part 6 of the National Parks and Wildlife Act 1974.

Uncertainties

N/A

Reference source

Department of Planning, Industry and Environment (2020a) BioNet Atlas Search. Website: https://www.environment.nsw.gov.au/atlaspublicapp/UI_Modules/ATLAS_/AtlasSearch.aspx?who=0b679421-e424-47ea-b672-f30693729a7e. Accessed: May 2020.

Reliability

Well-known database search suggested by the NSW Department of Planning, Industry and Environment to identify records of potentially occurring MNES.

Uncertainties

N/A

Reference source

Department of Planning, Industry and Environment (2020b) Threatened Biodiversity Data Collection. Website: https://www.environment.nsw.gov.au/AtlasApp/UI_Modules/TSM_/Default.aspx?a=1. Accessed: May 2020.

Reliability

Reliable source of desktop information. Website of the NSW Department of Planning, Industry and Environment. Contains information on threatened species ecological data.

Uncertainties

N/A

Reference source

Department of Sustainability, Environment, Water, Population and Communities (2011) Environment Protection and Biodiversity Conservation Act 1999 referral guidelines for the vulnerable striped legless lizard, Delma impar.

Reliability

Published guideline to assist in determining significant impact on the Striped Legless Lizard.

Uncertainties

N/A

Note: PDF may contain fields not relevant to your application. These fields will appear blank or unticked. Please disregard these fields.

Reference source

Department of the Environment (2014) EPBC Act Referral Guidelines for the Vulnerable Koala (combined populations of Queensland, New South Wales and the Australian Capital Territory). Prepared by the Commonwealth Department of the Environment.

Reliability

Published guideline prepared as part of the Commonwealth EPBC Act.

Uncertainties

N/A

Reference source

Department of the Environment (2020) National Flying-fox monitoring viewer. Website: http://www.environment.gov.au/webgis-framework/apps/ffc-wide/ffc-wide.jsf. Accessed: May 2020.

Reliability

Reliable source of information containing threatened species records and Flying-fox camp locations.

Uncertainties

N/A

Reference source

Doody, T. M., Hancock, P. J. and Pritchard, J. L. (2018) Assessing Groundwater-Dependent Ecosystems: IESC Information Guidelines Explanatory Note. A report prepared for the Independent Expert Scientific Committee on Coal Seam Gas and Large Coal Mining Development through the Department of Environment and Energy.

Reliability

Published guideline containing scientific advice on potential water-related impacts of coal seam gas and large coal mining development proposals.

Uncertainties

N/A

Reference source

Eco Logical Australia (2017a) Mount Pleasant Operation Rail Modification – Terrestrial Fauna Survey Report. Prepared for MACH Energy Australia Pty Ltd.

Reliability

Survey report.

Uncertainties

N/A

Reference source

Eco Logical Australia (2017b) Mount Pleasant Operation Rail Modification – Portion of South West Out of Pit Emplacement – Terrestrial Fauna Survey Report. Prepared for MACH Energy Australia Pty Ltd.

Reliability

Survey report.

Uncertainties

N/A

Note: PDF may contain fields not relevant to your application. These fields will appear blank or unticked. Please disregard these fields.

Reference source

Future Ecology (in prep) Mount Pleasant Optimisation Project - Baseline Fauna Survey Report. Prepared for MACH Energy Australia Pty Ltd.

Reliability

Survey report.

Uncertainties

N/A

Reference source

Hunter Eco (in prep) Mount Pleasant Optimisation Project – Baseline Flora Survey Report. Prepared for MACH Energy Australia Pty Ltd.

Reliability

Survey report.

Uncertainties

N/A

Reference source

Isbell, R. F. (2016) The Australian Soil Classification (Second Edition). Prepared with the National Committee on Soil and Terrain.

Reliability

Reliable source of desktop information containing national scale soil classifications.

Uncertainties

N/A

Reference source

MACH Energy (2019a) Aboriginal Heritage Management Plan.

Reliability

Management Plan prepared for the existing operations at the Mount Pleasant Operation.

Uncertainties

N/A

Reference source

MACH Energy (2019b) Water Management Plan.

Reliability

Management Plan prepared for the existing operations at the Mount Pleasant Operation.

Uncertainties

N/A

Reference source

Mitchell, P. (2002) NSW Landscapes Mapping: Background and Methodology. Prepared for the New South Wales National Parks and Wildlife Service.

Reliability

Reliable source of desktop information containing state scale landscape mapping.

Note: PDF may contain fields not relevant to your application. These fields will appear blank or unticked. Please disregard these fields.

Uncertainties

N/A

Reference source

National Health and Medical Research Council and National Resource Management Ministerial Council (2011) Australian Drinking Water Guidelines, Paper 6 National Water Quality Management Strategy. National Health and Medical Research Council, National Resource Management Ministerial Council, Commonwealth of Australia, Canberra. Vol. 3.5, pp. 848 849.

Reliability

Published guideline prepared by the National Health and Medical Research Council and National Resource Management Ministerial Council.

Uncertainties

N/A

Reference source

New South Wales Government (2017) Social impact assessment guideline: For State significant mining, petroleum production and extractive industry development. Prepared by the State of New South Wales through its Department of Planning and Environment.

Reliability

Published guideline prepared by the NSW Department of Planning and Environment.

Uncertainties

N/A

Reference source

PPK Environment & Infrastructure (1997) Water Management Studies.

Reliability

Supplementary Report 3 in the approved Mount Pleasant Mine Environmental Impact Statement.

Uncertainties

N/A

Reference source

Threatened Species Scientific Committee (2019) Conservation Advice Hirundapus caudacutus White-throated Needletail. Prepared by the Department of the Environment and Energy, Canberra. In effect under the EPBC Act from 04-Jul-2019.

Reliability

Published conservation advice established under the Commonwealth EPBC Act.

Uncertainties

N/A

Note: PDF may contain fields not relevant to your application. These fields will appear blank or unticked. Please disregard these fields.

Section 8

Proposed alternatives

Do you have any feasible alternatives to taking the proposed action?

Yes ☑ No

Note: PDF may contain fields not relevant to your application. These fields will appear blank or unticked. Please disregard these fields.

Section 9

Person proposing the action

9.1.1 Is the person proposing the action a member of an organisation?

☑ Yes ☐ No

Organisation

Organisation name	MACH ENERGY AUSTRALIA PTY LTD
Business name	
ABN	34608495441
ACN	
Business address	Suit 1, Level 3, 426 King Street, Newcastle, 2302, NSW, Australia
Postal address	
Main Phone number	1 800 931 873
Fax	
Primary email address	info@machenergyaustralia.com.au
Secondary email address	

9.1.2 I qualify for exemption from fees under section 520(4C)(e)(v) of the EPBC Act because I am:

☐ Small business
☑ Not applicable

9.1.2.2 I would like to apply for a waiver of full or partial fees under Schedule 1, 5.21A of the EPBC Regulations *

☐ Yes ☑ No

9.1.3 Contact

First name	Chris
Last name	Lauritzen
Job title	General Manager – Resource Development
Phone	02 5517 1150 / 1800 931 873
Mobile	[redacted]
Fax	
Email	Chris.Lauritzen@machenergyaustralia.com.au
Primary address	PO Box 2115, Dangar, 2309, NSW, Australia
Address	

Declaration: Person proposing the action

I, CHRISTIAN LAURITZEN on behalf of MACH ENERGY AUSTRALIA PTY LTD, declare that to the best of my knowledge the information I have given on, or attached to the EPBC Act Referral is complete, current and correct. I understand that giving false or misleading information is a serious offence. I declare that I am not taking the action on behalf or for the benefit of any other person or entity.

Signature: ..... Date: 28/7/2020

I, CHRISTIAN LAURITZEN on behalf of MACH ENERGY AUSTRALIA PTY LTD, the person proposing the action, consent to the designation of CHRISTIAN LAURITZEN on behalf of MACH ENERGY AUSTRALIA PTY LTD as the proponent for the purposes of the action described in this EPBC Act Referral.

Signature: ..... Date: 28/7/2020

Note: PDF may contain fields not relevant to your application. These fields will appear blank or unticked. Please disregard these fields.

Proposed designated proponent

9.2.1 Is the proposed designated proponent a member of an organisation?

☑ Yes ☐ No

Organisation

Organisation name	MACH ENERGY AUSTRALIA PTY LTD
Business name	
ABN	34608495441
ACN	
Business address	Suit 1, Level 3, 426 King Street, Newcastle, 2309, NSW, Australia
Postal address	
Main Phone number	1 800 931 873
Fax	
Primary email address	info@machenergyaustralia.com.au
Secondary email address	

9.2.2 Contact

First name	Chris
Last name	Lauritzen
Job title	General Manager – Resource Development
Phone	02 5517 1150 / 1800 931 873
Mobile	[redacted]
Fax	
Email	Chris.Lauritzen@machenergyaustralia.com.au
Primary address	PO Box 2115, Dangar, 2309, NSW, Australia
Address	

Declaration: Proposed Designated Proponent

I, CHRISTIAN LAURITZEN on behalf of MACH ENERGY AUSTRALIA PTY LTD, the proposed designated proponent, consent to the designation of myself as the proponent for the purposes of the action described in this EPBC Act Referral.

Signature: ..... Date: 28/7/2020

Australian Government
Department of Agriculture, Water and the Environment

Note: PDF may contain fields not relevant to your application. These fields will appear blank or unticked. Please disregard these fields.

Referring party (person preparing the information)

9.3.1 Is the referring party (person preparing the information) a member of an organisation?

☑ Yes ☐ No

Organisation

Organisation name	MACH ENERGY AUSTRALIA PTY LTD
Business name	
ABN	34608495441
ACN	
Business address	Suite 1, Level 3, 426 King Street, Newcastle, 2302, NSW, Australia
Postal address	
Main Phone number	1 800 931 873
Fax	
Primary email address	info@machenergyaustralia.com.au
Secondary email address	

9.3.2 Contact

First name	Chris
Last name	Lauritzen
Job title	General Manager – Resource Development
Phone	[redacted] 1800 931 873
Mobile	
Fax	
Email	Chris.Lauritzen@machenergyaustralia.com.au
Primary address	PO Box 2115, Dangar, 2309, NSW, Australia
Address	

Declaration: Referring party (person preparing the information)

I, CHRISTIAN LAURITZEN **, declare that to the best of my knowledge the information I have given on, or attached to this EPBC Act Referral is complete, current and correct. I understand that giving false or misleading information is a serious offence.**

Signature: ..... **Date:** 28/7/2020

Note: PDF may contain fields not relevant to your application. These fields will appear blank or unticked. Please disregard these fields.

Appendix A

Attachment

Document Type	File Name
action_area_images	Figures_Combined.pdf
corp_env_policy_docs	Environmental policy.pdf

Appendix B

Coordinates

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