

MACHEnergy

Mount Pleasant Operation

A JOINT VENTURE WITH
JODA
Japan Coal Development Australia



Attachment 1

Secretary's Environmental
Assessment Requirements

Mr Chris Lauritzen
General Manager – Resource Development
MACH Energy Australia Pty Ltd

Via email: Chris.Lauritzen@machenergy.com.au

02/10/2020

Dear Mr Lauritzen,

**Clarification of the Planning Secretary's Environmental Assessment Requirements
Mount Pleasant Optimisation Project (SSD 10418)**

I refer to your letter dated 25 June 2020, seeking clarification regarding traffic, transport and land resource requirements outlined in the Planning Secretary's Environmental Assessment Requirements (SEARs) for the Mount Pleasant Optimisation Project, issued on 17 February 2020.

As you are aware, the SEARs require the preparation of an Agricultural Impact Statement (AIS). MACH Energy has indicated that, with the exception of the revised Northern Link Road alignment, the Project would be wholly contained within the boundaries of existing mining leases and there would be no significant net increase to the total disturbance footprint approved under DA 92/97. However, the Project Area adjoins mapped Biophysical Strategic Agricultural Land (BSAL) and is in proximity to areas mapped as being part of the Upper Hunter Equine and Viticulture Critical Industry Clusters (CICs).

On this basis, the Department considers that the assessment of the Project's potential agricultural impacts should include consideration of nearby Strategic Agricultural Land and associated agricultural operations. The Department notes that MACH Energy proposes to address the Project's potential impacts on land resources through:

- completion of a Land and Soil Assessment;
- quantification of direct impacts on mapped Equine CIC land associated with the revised Northern Link Road alignment and nearby relinquishment area;
- consideration of potential indirect impacts on adjoining agricultural land uses and CICs in the vicinity of the Project, including air quality, noise and blasting impacts, impacts on water resources and visual impacts; and
- consideration of land use compatibility under clause 12 of *State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007*.

The Department acknowledges that some impacts on CICs and agricultural operations may be addressed to varying extents in the technical assessments for air quality, noise and blasting, groundwater and surface water and visual impacts. Nonetheless, the Department considers that a consolidated summary and analysis of these impacts should be provided in a single chapter or appendix to the Environmental Impact Statement. This assessment does not necessarily need to be a standalone specialist assessment, but should bring together the above potential sources of impacts into a considered and consolidated assessment of the Project's potential to impact on agricultural and land resources.

The Department also draws your attention to the *Strategic Regional Land Use Policy: Guideline for Agricultural Impact Statements* (2012), which states that if a Project is located on within 2 kilometres of any Strategic Agricultural Land it should include consideration of relevant Gateway Criteria, including potential impacts on agricultural scenic and landscape values and access to agricultural resources and infrastructure. For further information, please see:

<https://www.planning.nsw.gov.au/~media/Files/DPE/Guidelines/strategic-regional-land-use-policy-guideline-for-agricultural-impact-statements-2012-10.ashx>

In addition, the Department wishes to emphasise the importance of effective and genuine consultation with affected stakeholders, including relevant equine, viticulture or other agricultural operations in the vicinity of the Project.

Finally, the Department has reviewed MACH Energy's proposed scope for the Road Safety Audit which is also a requirement of the SEARs. The Department considers that the proposed scope is appropriate for assessing the traffic and road safety impacts of the Project.

If you have any enquiries about these requirements, please contact Tegan Cole on the details listed above.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'M Spratt', written in a cursive style.

Matthew Spratt
Director
Resource Assessments
as delegate for the Planning Secretary



Stirling Bartlam
On behalf of MACH Energy Australia Pty Ltd
Suite 2, Level 3
24 McDougall Street
MILTON Queensland 4064

17/02/2020

Dear Mr Bartlam

**Mount Pleasant Optimisation Project (SSD-10418)
Planning Secretary's Environmental Assessment Requirements**

Please find attached the Planning Secretary's Environmental Assessment Requirements (SEARs) for the preparation of an Environmental Impact Statement (EIS) for the Mount Pleasant Optimisation Project. These requirements have been prepared in consultation with relevant public authorities based on the information you have provided to date. The agencies' comments are attached for your information (see Attachment 2). You must have regard to these comments in the preparation of the EIS.

Please note that the Planning Secretary may modify these requirements at any time. If you do not submit a development application (DA) and EIS for the development within 2 years, you must consult further with the Planning Secretary in relation to the preparation of the EIS.

Prior to exhibiting the EIS, the Department of Planning, Industry and Environment (the Department) will review the document in consultation with relevant authorities to determine if it addresses these SEARs. You may be required to submit an amended EIS if it does not adequately address these requirements.

Please contact the Department at least two weeks before you propose to submit your DA and EIS. This will enable the Department to provide lodgement instructions, confirm the applicable fee, determine the required number of copies of the EIS and discuss potential exhibition periods.

The Department is currently developing a new environmental impact assessment guidance series for State significant projects in NSW which is likely to include a specific guideline for preparing an EIS. It is recommended that MACH Energy Australia Pty Ltd (MACH Energy) has regard to this guidance series, if released during preparation of the EIS.

The Department recognises that MACH Energy has already commenced stakeholder engagement as part of its routine consultation program and to inform its Social Impact Assessment (SIA). Further, the Department has reviewed the SIA Scoping Report for the project which has been prepared in accordance with the Department's *Social Impact Assessment Guideline*. The Department will provide detailed comments on the SIA Scoping Report separately. You are encouraged to have regard to these comments when undertaking the SIA for the EIS.

The Department wishes to emphasise the importance of continued effective and genuine community consultation during the preparation of the EIS. This process should provide the community with a clear understanding of the proposal and its potential impacts and include active engagement with the community regarding key issues of concern.

If your development is likely to have a significant impact on matters of National Environmental Significance, it will also require approval under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). This approval would be in addition to any approvals required under NSW legislation;

however, there may be opportunity to streamline the two assessment processes in accordance with the Bilateral Agreement between the NSW and Commonwealth governments. Please contact the Commonwealth Department of the Environment and Energy to determine if an approval under the EPBC Act is required (<http://www.environment.gov.au> or 6274 1111).

If you have any enquiries about these requirements, please contact Lauren Evans on the details listed above.

Yours sincerely

A handwritten signature in black ink, appearing to read 'M Sprott', written in a cursive style.

Matthew Sprott
A/Director
Resource Assessments (Coal & Quarries)
as delegate for the Planning Secretary

Planning Secretary's Environmental Assessment Requirements
Section 4.12(8) of the *Environmental Planning and Assessment Act 1979*
Schedule 2 of the Environmental Planning and Assessment Regulation 2000

Application Number	SSD-10418
Proposal	<p>The Mount Pleasant Optimisation Project, which includes:</p> <ul style="list-style-type: none"> · extending the life of open cut mining operations until 2048; · increasing the depth of the open cut pit to mine deeper coal seams; · increasing the annual extraction and production rate to a maximum of 21 million tonnes of run-of-mine coal per year; · upgrading coal handling and processing infrastructure; and · changes to overburden emplacement and to the approved final landform.
Location	1100 Wybong Road, Muswellbrook
Applicant	MACH Energy Australia Pty Ltd
Date of Issue	17/02/2020
General Requirements	<p>The Environmental Impact Statement (EIS) for the development must comply with the requirements of Schedule 2 of the <i>Environmental Planning and Assessment Regulation 2000</i>.</p> <p>In particular, the EIS must include:</p> <ul style="list-style-type: none"> · a stand-alone executive summary; · a full description of the development, including: <ul style="list-style-type: none"> - historical mining operations on and nearby the site; - the resource to be extracted (size and quality), demonstrating efficient resource recovery within environmental constraints; - the mine layout and scheduling; - coal production rates (run-of-mine and product); - coal processing and transport arrangements; - infrastructure and facilities (including any existing infrastructure or infrastructure that would be required for the development, but the subject of a separate approval process); - workforce requirements during all phases of the development (on a full-time equivalent basis); - surface disturbance footprint; - a waste (overburden, coarse rejects, tailings, etc) management strategy; - a water management strategy; - a rehabilitation strategy; - the likely interactions between the development and any other existing, approved or proposed mining development or power station in the vicinity of the site; · a strategic justification of the development focusing on site selection and the suitability of the proposed site; · a list of any approvals that must be obtained before the development may commence; · an assessment of the likely impacts of the development on the environment, focusing on the key issues identified below, including: <ul style="list-style-type: none"> - a description of the existing environment likely to be affected by the development, using sufficient baseline/background data; - an assessment of the likely impacts for all stages of the development, including any cumulative impacts, taking into consideration any relevant legislation, environmental planning instruments, guidelines, policies, plans

	<p>and industry codes of practice;</p> <ul style="list-style-type: none"> • a description of the measures that would be implemented to avoid, minimise, mitigate and/or offset the likely impacts of the development, and an assessment of: <ul style="list-style-type: none"> - whether these measures are consistent with industry best practice, and represent the full range of reasonable and feasible mitigation measures that could be implemented; - the likely effectiveness of these measures; and - whether contingency measures would be necessary to manage any residual risks; • a description of the measures that would be implemented to monitor and report on the environmental performance of the development; • a consolidated summary of all the proposed environmental management and monitoring measures, identifying all the commitments in the EIS; • consideration of the development against all relevant environmental planning instruments (including Part 3 of the <i>State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007</i>); • the reasons why the development should be approved, having regard to: <ul style="list-style-type: none"> - relevant matters for consideration under the <i>Environmental Planning and Assessment Act 1979</i>, including the objects of the Act; - the biophysical, economic and social impacts of the development, including the principles of ecologically sustainable development; - the suitability of the site with respect to potential land use conflicts with existing and future surrounding land uses; and - feasible alternatives to the development (and its key components), including the consequences of not carrying out the development; • a signed statement from the author of the EIS, certifying that the information contained within the document is neither false nor misleading. <p>While not exhaustive, Attachment 1 contains a list of some of the environmental planning instruments, guidelines, policies, and plans that may be relevant to the environmental assessment of this development.</p> <p>In addition to the matters set out in Schedule 1 of the <i>Environmental Planning and Assessment Regulation 2000</i>, the development application must be accompanied by an:</p> <ul style="list-style-type: none"> • Estimate of Capital Investment Value - a signed report from a suitably qualified and experienced person that includes an accurate estimate of the capital investment value (as defined in Clause 3 of the <i>Environmental Planning and Assessment Regulation 2000</i>), including details of all the assumptions and components from which the capital investment value calculation is derived.
Key Issues	<p>The EIS must address the following key issues:</p> <ul style="list-style-type: none"> • Air Quality – including: <ul style="list-style-type: none"> - a detailed assessment of potential construction and operational air quality impacts, in accordance with the <i>Approved Methods for the Modelling and Assessment of Air Pollutants in NSW</i>, and with a particular focus on particulate matter (PM_{2.5} and PM₁₀) emissions, and having regard to the <i>Voluntary Land Acquisition and Mitigation Policy</i>; and - an assessment of the likely greenhouse gas emissions of the development; • Noise & Blasting – including: <ul style="list-style-type: none"> - a detailed assessment of the likely construction, operational and off- site transport noise impacts of the development in accordance with the <i>Interim Construction Noise Guideline</i>, <i>NSW Noise Policy for Industry</i> and the <i>NSW Road Noise Policy</i> respectively, and having regard to the <i>Voluntary Land Acquisition and Mitigation Policy</i>;

- proposed blasting hours, frequency and methods; and
- a detailed assessment of the likely blasting impacts of the development (including ground vibrations, overpressure, flyrock, visual and fumes/odour) on people, animals, buildings/structures, infrastructure and significant natural features, having regard to the relevant ANZEC guidelines;
- **Water** – including:
 - a detailed site water balance, including a description of site water demands, water disposal methods (inclusive of volume and frequency of any water discharges), water supply infrastructure and water storage structures;
 - identification of any licensing requirements or other approvals under the *Water Act 1912* and/or *Water Management Act 2000*;
 - demonstration that water for the construction and operation of the proposed development can be obtained from an appropriately authorised and reliable supply in accordance with the operating rules of any relevant Water Sharing Plan (WSP) or water source embargo;
 - an assessment of any likely flooding impacts of the development;
 - the measures which would be put in place to control sediment run-off and avoid erosion;
 - an assessment of the likely impacts of the development on the quantity and quality of existing surface and groundwater resources including a detailed assessment of proposed water discharge quantities and quality against receiving water quality and flow objectives; and
 - an assessment of the likely impacts of the development on aquifers, watercourses, riparian land, water-related infrastructure, and other water users;
- **Visual** – including a detailed assessment of the likely visual impacts of the development (during and post-mining) on private landowners in the vicinity of the development and key vantage points in the public domain (including views from public roads), paying particular attention to any new or modified landforms, and to minimising lighting impacts;
- **Rehabilitation and Final Landform** – including
 - a description of final landform design objectives, having regard to achieving a natural landform that is safe, stable, non-polluting, fit for the nominated post-mining land use and sympathetic with surrounding landforms;
 - an analysis of final landform options, including the short and long-term cost and benefits, constraints and opportunities of each, and detailed justification for the preferred option;
 - identification and assessment of post-mining land use options, having regard to any relevant strategic land use planning or resource management plans/policies;
 - rehabilitation objectives and completion criteria to achieve the nominated post-mining land use;
 - a detailed description of the progressive rehabilitation measures that would be implemented over the life of the development and how this rehabilitation would be integrated with surrounding mines and land uses;
 - a detailed description of the proposed rehabilitation and mine closure strategies for the development, having regard to the key principles in *Strategic Framework for Mine Closure*; and
 - the measures which would be put in place for the long-term protection and/or management of the site and any biodiversity offset areas post-mining;
- **Biodiversity** – including:
 - accurate predictions of any vegetation to be cleared on site;
 - an assessment of the likely biodiversity impacts of the development, paying particular attention to threatened species, populations and ecological communities and groundwater dependent ecosystems, undertaken in

- accordance with the *Biodiversity Assessment Method* and documented in a Biodiversity Development Assessment Report;
- in the event that a 'land swap' option is proposed, an assessment of any land identified for relinquishment, undertaken in accordance with the *Biodiversity Assessment Method* and documented in a Biodiversity Development Assessment Report; and
- a strategy to offset any residual impacts of the development in accordance with the offset rules under the *Biodiversity Offsets Scheme*;
- **Heritage** – including:
 - an assessment of the potential impacts of the development on Aboriginal heritage (cultural and archaeological), including consultation with relevant Aboriginal communities/parties and documentation of the views of these stakeholders regarding the likely impact of the development on their cultural heritage; and
 - identification of historic heritage in the vicinity of the development and an assessment of the likelihood and significance of impacts on heritage items;
- **Traffic & Transport** – including:
 - an assessment of the likely transport impacts of the development on the capacity, condition, safety and efficiency of the road and rail networks, including undertaking a road safety audit; and
 - a description of the measures that would be implemented to mitigate any impacts, including concept plans for any proposed upgrades, developed in consultation with the relevant roads authority;
- **Land Resources** – including:
 - an assessment of the likely impacts of the development on the soils and land capability of the site and surrounds, paying particular attention to strategic agricultural land;
 - an assessment of the agricultural impacts of the development; and
 - an assessment of the compatibility of the development with other land uses in the vicinity of the development, in accordance with the requirements of Clause 12 of *State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007*, paying particular attention to any potential impacts on Critical Industry Clusters;
- **Waste** – including estimates of the quantity and nature of the waste streams that would be generated by the project (including tailings and coarse rejects) and any measures that would be implemented to minimise, manage or dispose of these waste streams;
- **Hazards** – including:
 - an assessment of the likely risks to public safety, paying particular attention to potential bushfire risks, interactions with any nearby prescribed dams, and the handling and use of any dangerous goods; and
 - a health risk assessment that considers the adverse effects from human exposure to acute and cumulative project related environmental hazards, in accordance with *Environmental Health Risk Assessment: Guidelines for assessing human health risk from environmental hazards*;
- **Social** – including a detailed assessment of the potential social impacts of the development that builds on the findings of the Social Impact Assessment Scoping Report, in accordance with the *Social impact assessment guideline for State significant mining, petroleum production and extractive industry development 2017*, paying particular consideration to:
 - how the development might affect people's way of life, community, access to and use of infrastructure, services and facilities, culture, health and wellbeing, surroundings, personal and property rights, decision-making systems, and fears and aspirations;
 - the principles in Section 1.3 of the guideline; and
 - the review questions in Appendix D of the guideline;

	<ul style="list-style-type: none"> • Economic – including a detailed assessment of the likely economic impacts of the development, in accordance with the <i>Guidelines for the economic assessment of mining and coal seam gas proposals 2015</i>, paying particular attention to: <ul style="list-style-type: none"> - the costs and benefits of the project; identifying whether the development as a whole would result in a net benefit to NSW, including consideration of fluctuation in commodity markets and exchange rates; and - the demand on community infrastructure and services; and • Cumulative Impacts – including a detailed assessment of the cumulative impacts of the development, in combination with other existing and approved mining projects in the locality, with a particular focus on air quality, noise, traffic and social impacts, as well as impacts on water resources.
Consultation	<p>During the preparation of the EIS, you must consult with relevant local, State and Commonwealth Government authorities, service providers, Aboriginal stakeholders, community groups and affected landowners.</p> <p>In particular you must:</p> <ul style="list-style-type: none"> • consult with: <ul style="list-style-type: none"> - affected landowners; - the Mount Pleasant Coal Mine Community Consultative Committee; - local community groups; - Muswellbrook Shire Council; - the Biodiversity and Conservation Division within the Department; - the NSW Heritage Council; - the Environment Protection Authority; - the Resources Regulator; - the Division of Resources and Geoscience within the Department; - the Water Group within the Department; - the Crown Lands Group within the Department; - Primary Industries (including NSW Forestry, Agriculture and Fisheries); - Hunter Local Land Services; - NSW Health; and - Transport for NSW. <p>The EIS must:</p> <ul style="list-style-type: none"> • describe the consultation process used and demonstrate that effective consultation has occurred; • describe the issues raised; • identify where the design of the development has been amended and/or mitigation proposed to address issues raised; and • otherwise demonstrate that issues raised have been appropriately addressed in the assessment.
Further consultation after 2 years	<p>If you do not lodge a development application and EIS for the development within 2 years of the issue date of these requirements, you must consult further with the Planning Secretary in relation to the preparation of the EIS.</p>

ATTACHMENT 1

Environmental Planning Instruments, Policies, Guidelines & Plans

Land		
		Interim Protocol for Site Verification & Mapping of Biophysical Strategic Land (OEH)
		Soil and Landscape Issues in Environmental Impact Assessment (NOW)
		Agfact AC.25: Agricultural Land Classification (NSW Agriculture)
		Guideline for Preparing Agricultural Impact Statements (DPI 2012) and the Agricultural Impact Statement Technical Notes 2013 (DPI)
		Upper Hunter Strategic Regional Land Use Plan 2012 (DPI)
		State Environmental Planning Policy No. 55 – Remediation of Land
		Australian and New Zealand Guidelines for the Assessment and Management of Contaminated Sites (ANZECC)
		Land Use Conflict Risk Assessment Guide (DPI)
Water		
Water Sharing Plans		Hunter Unregulated and Alluvial Water Sources 2009
		Hunter Regulated River Water Source
Groundwater		NSW State Groundwater Policy Framework Document (NOW)
		NSW State Groundwater Quality Protection Policy (NOW)
		NSW State Groundwater Quantity Management Policy (NOW)
		NSW Aquifer Interference Policy 2012 (NOW)
		Australian Groundwater Modelling Guidelines 2012 (Commonwealth)
		National Water Quality Management Strategy Guidelines for Groundwater Protection in Australia (ARMCANZ/ANZECC)
		Guidelines for the Assessment & Management of Groundwater Contamination (EPA)
Surface Water		Hunter River Salinity Trading Scheme (EPA)
		NSW State Rivers and Estuary Policy (NOW)
		NSW Government Water Quality and River Flow Objectives (EPA)
		Using the ANZECC Guideline and Water Quality Objectives in NSW (EPA)
		National Water Quality Management Strategy: Australian Guidelines for Fresh and Marine Water Quality (ANZECC/ARMCANZ)
		National Water Quality Management Strategy: Australian Guidelines for Water Quality

Monitoring and Reporting (ANZECC/ARMCANZ)

National Water Quality Management Strategy: Guidelines for Sewerage Systems – Effluent Management (ARMCANZ/ANZECC)

National Water Quality Management Strategy: Guidelines for Sewerage Systems – Use of Reclaimed Water (ARMCANZ/ANZECC)

Approved Methods for the Sampling and Analysis of Water Pollutants in NSW (EPA)

Managing Urban Stormwater: Soils & Construction (Landcom) and associated Volume 2E: Mines and Quarries (DECC)

Managing Urban Stormwater: Treatment Techniques (EPA)

Managing Urban Stormwater: Source Control (EPA)

Technical Guidelines: Bunding & Spill Management (EPA)

Environmental Guidelines: Use of Effluent by Irrigation (EPA)

A Rehabilitation Manual for Australian Streams (LWRRDC and CRCCH)

NSW Guidelines for Controlled Activities (NOW)

Flooding

Floodplain Development Manual (OEH)

Floodplain Risk Management Guideline (OEH)

Biodiversity

Biodiversity Assessment Method (OEH)

Fisheries NSW policies and guidelines

Guidelines for developments adjoining Department of Environment, Climate Change and Water (DECCW, 2010)

Guidelines for Threatened Species Assessment (DP&E)

Guidance to assist a decision-maker to determine a serious and irreversible impact (OEH)

NSW State Groundwater Dependent Ecosystem Policy (NOW)

Revocation, recategorisation and road adjustment policy (OEH, 2012)

Risk Assessment Guidelines for Groundwater Dependent Ecosystems (NOW)

State Environmental Planning Policy No. 44 – Koala Habitat Protection

Heritage

The Burra Charter (The Australia ICOMOS charter for places of cultural significance)

Aboriginal Cultural Heritage Consultation Requirements for Proponents (OEH)

Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW 2010 (DECCW)

Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW 2010 (DECCW)

Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in

NSW (OEH)

NSW Heritage Manual 1996 (OEH)

Statements of Heritage Impact (OEH)

Assessing Significance for Historical Archaeological Sites and Relics 2009 (OEH)

Hunter Regional Environmental Plan 1989 (Heritage)

Noise & Blasting

NSW Noise Policy for Industry (EPA)

Interim Construction Noise Guideline (DECC)

NSW Road Noise Policy (EPA)

Rail Infrastructure Noise Guideline (EPA)

Voluntary Land Acquisition and Mitigation Policy for State Significant Mining, Petroleum and Extractive Industry Developments (DP&E)

Technical basis for guidelines to minimise annoyance due to blasting overpressure and ground vibration (ANZEC)

Assessing Vibration: A Technical Guideline (DEC)

Air

Approved Methods and Guidance for the Modelling and Assessment of Air Pollutants in NSW (EPA)

Approved Methods for the Sampling and Analysis of Air Pollutants in NSW (EPA)

Coal Mine Particulate Matter Control Best Practice – Site Specific Determination Guideline (EPA)

Generic Guidance and Optimum Model Settings for the CALPUFF Modelling System for Inclusion in the Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (EPA)

National Greenhouse Accounts Factors (Commonwealth)

Voluntary Land Acquisition and Mitigation Policy for State Significant Mining, Petroleum and Extractive Industry Developments 2018 (DP&E)

Transport

Guide to Traffic Generating Development (RTA)

Road Design Guide (RMS) & relevant Austroads Standards

Hazards

State Environmental Planning Policy No. 33 – Hazardous and Offensive Development

Hazardous and Offensive Development Application Guidelines – Applying SEPP 33

Hazardous Industry Planning Advisory Paper No. 6 – Guidelines for Hazard Analysis

Planning for Bush Fire Protection 2006 (RFS)

Resource	
	Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves 2012 (JORC)
Waste	
	Waste Classification Guidelines (DECC)
Rehabilitation	
	Mine Rehabilitation – Leading Practice Sustainable Development Program for the Mining Industry (Commonwealth)
	Mine Closure and Completion – Leading Practice Sustainable Development Program for the Mining Industry (Commonwealth)
	Strategic Framework for Mine Closure (ANZMEC-MCA)
Social & Economic	
	Guidelines for the economic assessment of mining and coal seam gas proposals 2015 (NSW Government)
	Social impact assessment guideline for State significant mining, petroleum production and extractive industry development 2017 (DP&E)
Environmental Planning Instruments - General	
	State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007
	State Environmental Planning Policy (State and Regional Development) 2011
	State Environmental Planning Policy (Infrastructure) 2007
	Muswellbrook Local Environment Plan 2009
	Hunter Regional Plan 2036

ATTACHMENT 2

Agencies' Correspondence



Our ref: DOC20/5454
Your ref: SSD-10418

8 January 2020

Lauren Evans
Team Leader
Energy and Resource Assessments
Planning and Assessment
Department of Planning, Industry and Environment

lauren.evans@planning.nsw.gov.au

Dear Ms Evans

Input into Secretary's Environmental Assessment Requirements – State Significant Development – Mount Pleasant Optimisation Project – Muswellbrook LGA (SSD-10418)

I refer to your email dated 6 January 2020 seeking input into the Secretary's Environmental Assessment Requirements (SEARs) for the Mount Pleasant Optimisation Project. The proposed development is within the Muswellbrook local government area.

The Biodiversity and Conservation Division (BCD) understands that the development involves extending the life of open cut mining operations until 2048, mining deeper coal seams to extract an additional 250 million tonnes of run-of-mine (ROM) coal, and extracting and processing up to 21 million tonnes of ROM coal per year. BCD understands that the proposal is a State Significant Development (SSD) project under the *Environmental Planning and Assessment Act 1979*.

BCD has reviewed the Scoping Report prepared in support of a request for Secretary's Environmental Assessment Requirements dated December 2019 as prepared by MACH Energy and has prepared Standard SEARs which are presented in **Attachment A**. There are no project-specific SEARs provided for this project (**Attachment B**). Details of guidance documents are provided in **Attachment C**.

With respect to Aboriginal cultural heritage, BCD notes that any Aboriginal cultural heritage assessment undertaken prior to 2010 is unlikely to meet current BCD Aboriginal cultural heritage guidelines for the assessment of Aboriginal cultural heritage in NSW. The *Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW* (OEH 2011) should be referenced in this instance.

If you have any further questions in relation to this matter, please contact Robert Gibson, Senior Regional Biodiversity Conservation Planning Officer, on 4927 3154.

Yours sincerely

NICOLE DAVIS
A/Senior Team Leader Planning
Hunter Central Coast Branch
Biodiversity and Conservation Division
Enclosure: Attachments A, B, C

Attachment A – Standard Environmental Assessment Requirements

Biodiversity
<ol style="list-style-type: none">1. Biodiversity impacts related to the proposed development (SSD 10418) are to be assessed in accordance with the Biodiversity Assessment Method and documented in a Biodiversity Development Assessment Report (BDAR). The BDAR must include information in the form detailed in the <i>Biodiversity Conservation Act 2016</i> (s6.12), <i>Biodiversity Conservation Regulation 2017</i> (s6.8) and Biodiversity Assessment Method.2. The BDAR must document the application of the avoid, minimise and offset framework including assessing all direct, indirect and prescribed impacts in accordance with the Biodiversity Assessment Method.3. The BDAR must include details of the measures proposed to address the offset obligation as follows;<ul style="list-style-type: none">• The total number and classes of biodiversity credits required to be retired for the development/project;• The number and classes of like-for-like biodiversity credits proposed to be retired;• The number and classes of biodiversity credits proposed to be retired in accordance with the variation rules;• Any proposal to fund a biodiversity conservation action;• Any proposal to conduct ecological rehabilitation (if a mining project);• Any proposal to make a payment to the Biodiversity Conservation Fund.<p>If seeking approval to use the variation rules, the BDAR must contain details of the reasonable steps that have been taken to obtain requisite like-for-like biodiversity credits.</p>4. The BDAR must be prepared by a person accredited in accordance with the Accreditation Scheme for the Application of the Biodiversity Assessment Method Order 2017 under s6.10 of the <i>Biodiversity Conservation Act 2016</i>.
Aboriginal cultural heritage
<ol style="list-style-type: none">5. The Environmental Impact Assessment (EIS) must identify and describe the Aboriginal cultural heritage values that exist across the whole area that will be affected by the development and document these in the Aboriginal Cultural Heritage Assessment Report (ACHAR). This may include the need for surface survey and test excavation. The identification of cultural heritage values should be guided by the Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW (DECCW, 2011) and consultation with BCD regional branch officers.6. Consultation with Aboriginal people must be undertaken and documented in accordance with the Aboriginal cultural heritage consultation requirements for proponents 2010 (DECCW). The significance of cultural heritage values for Aboriginal people who have a cultural association with the land must be documented in the ACHAR.

<p>7. Impacts on Aboriginal cultural heritage values are to be assessed and documented in the ACHAR. The ACHAR must demonstrate attempts to avoid impact upon cultural heritage values and identify any conservation outcomes. Where impacts are unavoidable, the ACHAR must outline measures proposed to mitigate impacts. Any objects recorded as part of the assessment must be documented and notified to BCD.</p>
<p>Historic heritage</p>
<p>8. The EIS must provide a heritage assessment including but not limited to an assessment of impacts to State and local heritage including conservation areas, natural heritage areas, places of Aboriginal heritage value, buildings, works, relics, gardens, landscapes, views, trees should be assessed. Where impacts to State or locally significant heritage items are identified, the assessment shall:</p> <ul style="list-style-type: none"> a. outline the proposed mitigation and management measures (including measures to avoid significant impacts and an evaluation of the effectiveness of the mitigation measures) generally consistent with the NSW Heritage Manual (1996), b. be undertaken by a suitably qualified heritage consultant(s) (note: where archaeological excavations are proposed the relevant consultant must meet the NSW Heritage Council's Excavation Director criteria), c. include a statement of heritage impact for all heritage items (including significance assessment), d. consider impacts including, but not limited to, vibration, demolition, archaeological disturbance, altered historical arrangements and access, landscape and vistas, and architectural noise treatment (as relevant), and e. where potential archaeological impacts have been identified develop an appropriate archaeological assessment methodology, including research design, to guide physical archaeological test excavations (terrestrial and maritime as relevant) and include the results of these test excavations.
<p>Water and soils</p>
<p>9. The EIS must map the following features relevant to water and soils including:</p> <ul style="list-style-type: none"> a. Acid sulfate soils (Class 1, 2, 3 or 4 on the Acid Sulfate Soil Planning Map). b. Rivers, streams, wetlands, estuaries (as described in s4.2 of the Biodiversity Assessment Method). c. Wetlands as described in s4.2 of the Biodiversity Assessment Method. d. Groundwater. e. Groundwater dependent ecosystems. f. Proposed intake and discharge locations.

<p>10. The EIS must describe background conditions for any water resource likely to be affected by the development, including:</p> <ul style="list-style-type: none"> a. Existing surface and groundwater. b. Hydrology, including volume, frequency and quality of discharges at proposed intake and discharge locations. c. Water Quality Objectives (as endorsed by the NSW Government http://www.environment.nsw.gov.au/ieo/index.htm) including groundwater as appropriate that represent the community's uses and values for the receiving waters. d. Indicators and trigger values/criteria for the environmental values identified at (c) in accordance with the ANZECC (2000) Guidelines for Fresh and Marine Water Quality and/or local objectives, criteria or targets endorsed by the NSW Government.
<p>11. The EIS must assess the impacts of the development on water quality, including:</p> <ul style="list-style-type: none"> a. The nature and degree of impact on receiving waters for both surface and groundwater, demonstrating how the development protects the Water Quality Objectives where they are currently being achieved, and contributes towards achievement of the Water Quality Objectives over time where they are currently not being achieved. This should include an assessment of the mitigating effects of proposed stormwater and wastewater management during and after construction. b. Identification of proposed monitoring of water quality.
<p>12. The EIS must assess the impact of the development on hydrology, including:</p> <ul style="list-style-type: none"> a. Water balance including quantity, quality and source. b. Effects to downstream rivers, wetlands, estuaries, marine waters and floodplain areas. c. Effects to downstream water-dependent fauna and flora including groundwater dependent ecosystems. d. Impacts to natural processes and functions within rivers, wetlands, estuaries and floodplains that affect river system and landscape health such as nutrient flow, aquatic connectivity and access to habitat for spawning and refuge (e.g. river benches). e. Changes to environmental water availability, both regulated/licensed and unregulated/rules-based sources of such water. f. Mitigating effects of proposed stormwater and wastewater management during and after construction on hydrological attributes such as volumes, flow rates, management methods and re-use options. g. Identification of proposed monitoring of hydrological attributes.
<p>Flooding and coastal erosion</p>
<p>13. The EIS must map the following features relevant to flooding as described in the Floodplain Development Manual 2005 (NSW Government 2005) including:</p> <ul style="list-style-type: none"> a. Flood prone land. b. Flood planning area, the area below the flood planning level. c. Hydraulic categorisation (floodways and flood storage areas).

14. The EIS must describe flood assessment and modelling undertaken in determining the design flood levels for events, including a minimum of the 1 in 10 year, 1 in 100 year flood levels and the probable maximum flood, or an equivalent extreme event.
<p>15. The EIS must model the effect of the proposed development (including fill) on the flood behaviour under the following scenarios:</p> <ul style="list-style-type: none"> a. Current flood behaviour for a range of design events as identified in 11 above. This includes the 1 in 200 and 1 in 500 year flood events as proxies for assessing sensitivity to an increase in rainfall intensity of flood producing rainfall events due to climate change.
<p>16. Modelling in the EIS must consider and document:</p> <ul style="list-style-type: none"> a. The impact on existing flood behaviour for a full range of flood events including up to the probable maximum flood. b. Impacts of the development on flood behaviour resulting in detrimental changes in potential flood affection of other developments or land. This may include redirection of flow, flow velocities, flood levels, hazards and hydraulic categories. c. Relevant provisions of the NSW Floodplain Development Manual 2005.
<p>17. The EIS must assess the impacts on the proposed development on flood behaviour, including:</p> <ul style="list-style-type: none"> a. Whether there will be detrimental increases in the potential flood affectation of other properties, assets and infrastructure. b. Consistency with Council floodplain risk management plans. c. Compatibility with the flood hazard of the land. d. Compatibility with the hydraulic functions of flow conveyance in floodways and storage in flood storage areas of the land. e. Whether there will be adverse effect to beneficial inundation of the floodplain environment, on, adjacent to or downstream of the site. f. Whether there will be direct or indirect increase in erosion, siltation, destruction of riparian vegetation or a reduction in the stability of river banks or watercourses. g. Any impacts the development may have upon existing community emergency management arrangements for flooding. These matters are to be discussed with the SES and Council. h. Whether the proposal incorporates specific measures to manage risk to life from flood. These matters are to be discussed with the SES and Council. i. Emergency management, evacuation and access, and contingency measures for the development considering the full range of flood risk (based upon the probable maximum flood or an equivalent extreme flood event). These matters are to be discussed with and have the support of Council and the SES. j. Any impacts the development may have on the social and economic costs to the community as consequence of flooding.

18. The [EIS/EA] must describe the potential effects of coastal processes and hazards (within the meaning of the Coastal Management Act 2016), including sea level rise and climate change:

- a. On the proposed development
- b. Arising from the proposed development.

19. The [EIS/EA] must consider have regard to any certified Coastal Management Program (or Coastal Zone Management Plan) and be consistent with the management objectives described in the Coastal Management Act 2016 and development controls for coastal management areas mapped under the State Environmental Planning Policy (Coastal Management) 2018.

Attachment B – Project specific environmental assessment requirements

Biodiversity - nil
Aboriginal cultural heritage - nil
Historic heritage - nil
Water and soils - nil
Flooding and coastal erosion - nil

Attachment C – Guidance material

Title	Web address
Relevant legislation	
<i>Biodiversity Conservation Act 2016</i>	https://www.legislation.nsw.gov.au/#/view/act/2016/63/full
<i>Coastal Management Act 2016</i>	https://www.legislation.nsw.gov.au/#/view/act/2016/20/full
<i>Commonwealth Environment Protection and Biodiversity Conservation Act 1999</i>	http://www.austlii.edu.au/au/legis/cth/consol_act/epabca1999588/
<i>Environmental Planning and Assessment Act 1979</i>	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+203+1979+cd+0+N
<i>Fisheries Management Act 1994</i>	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+38+1994+cd+0+N
<i>Marine Parks Act 1997</i>	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+64+1997+cd+0+N
<i>National Parks and Wildlife Act 1974</i>	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+80+1974+cd+0+N
<i>Protection of the Environment Operations Act 1997</i>	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+156+1997+cd+0+N
<i>Water Management Act 2000</i>	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+92+2000+cd+0+N
<i>Wilderness Act 1987</i>	http://www.legislation.nsw.gov.au/viewtop/inforce/act+196+1987+FIRST+0+N
Biodiversity	
Biodiversity Assessment Method (OEH, 2017)	http://www.environment.nsw.gov.au/resources/bcact/biodiversity-assessment-method-170206.pdf
Guidance and Criteria to assist a decision maker to determine a serious and irreversible impact (OEH, 2017)	http://www.environment.nsw.gov.au/resources/bcact/guidance-decision-makers-determine-serious-irreversible-impact-170204.pdf
NSW Guide to Surveying Threatened Plant	http://www.environment.nsw.gov.au/resources/threatenedspecies/160129-threatened-plants-survey-guide.pdf
Fisheries NSW policies and guidelines	http://www.dpi.nsw.gov.au/fisheries/habitat/publications/policies,-guidelines-and-manuals/fish-habitat-conservation
List of national parks	http://www.environment.nsw.gov.au/NationalParks/parksearchatoz.aspx
Revocation, recategorisation and road adjustment policy (OEH, 2012)	http://www.environment.nsw.gov.au/policies/RevocationOfLandPolicy.htm
Guidelines for developments adjoining land and water managed by the	http://www.environment.nsw.gov.au/protectedareas/developmentadjoiningdecc.htm

Title	Web address
Department of Environment, Climate Change and Water (DECCW, 2010)	
Heritage	
The Burra Charter (The Australia ICOMOS charter for places of cultural significance)	http://australia.icomos.org/wp-content/uploads/The-Burra-Charter-2013-Adopted-31.10.2013.pdf
Statements of Heritage Impact 2002 (HO & DUAP)	http://www.environment.nsw.gov.au/resources/heritagebranch/heritage/hmstatementsofhi.pdf
NSW Heritage Manual (DUAP) (scroll through alphabetical list to 'N')	http://www.environment.nsw.gov.au/Heritage/publications/
Aboriginal cultural heritage	
Aboriginal Cultural Heritage Consultation Requirements for Proponents (DECCW, 2010)	http://www.environment.nsw.gov.au/resources/cultureheritage/commconsultation/09781ACHconsultreq.pdf
Code of Practice for the Archaeological Investigation of Aboriginal Objects in New South Wales (DECCW, 2010)	http://www.environment.nsw.gov.au/resources/cultureheritage/10783FinalArchCoP.pdf
Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW (OEH 2011)	http://www.environment.nsw.gov.au/resources/cultureheritage/20110263ACHguide.pdf
Aboriginal Site Recording Form	http://www.environment.nsw.gov.au/resources/parks/SiteCardMainV1_1.pdf
Aboriginal Site Impact Recording Form	http://www.environment.nsw.gov.au/resources/cultureheritage/120558asirf.pdf
Aboriginal Heritage Information Management System (AHIMS) Registrar	http://www.environment.nsw.gov.au/contact/AHIMSRegistrar.htm
Care Agreement Application form	http://www.environment.nsw.gov.au/resources/cultureheritage/20110914TransferObject.pdf
Acid sulphate soils	
Acid Sulfate Soils Planning Maps via Data.NSW	http://data.nsw.gov.au/data/
Acid Sulfate Soils Manual (Stone et al. 1998)	http://www.environment.nsw.gov.au/resources/epa/Acid-Sulfate-Manual-1998.pdf
Acid Sulfate Soils Laboratory Methods Guidelines (Ahern et al. 2004)	http://www.environment.nsw.gov.au/resources/soils/acid-sulfate-soils-laboratory-methods-guidelines.pdf This replaces Chapter 4 of the Acid Sulfate Soils Manual above.
Flooding and coastal erosion	
Reforms to coastal erosion management	http://www.environment.nsw.gov.au/coasts/coastalerosionmgmt.htm

Title	Web address
Floodplain development manual	http://www.environment.nsw.gov.au/floodplains/manual.htm
Guidelines for Preparing Coastal Zone Management Plans	Guidelines for Preparing Coastal Zone Management Plans http://www.environment.nsw.gov.au/resources/coasts/130224CZMPGuide.pdf
NSW Climate Impact Profile	http://climatechange.environment.nsw.gov.au/
Climate Change Impacts and Risk Management	Climate Change Impacts and Risk Management: A Guide for Business and Government, AGIC Guidelines for Climate Change Adaptation
Water	
Water Quality Objectives	http://www.environment.nsw.gov.au/ieo/index.htm
ANZECC (2000) Guidelines for Fresh and Marine Water Quality	www.environment.gov.au/water/publications/quality/australia-n-and-new-zealand-guidelines-fresh-marine-water-quality-volume-1
Applying Goals for Ambient Water Quality Guidance for Operations Officers – Mixing Zones	http://deccnet/water/resources/AWQGuidance7.pdf
Approved Methods for the Sampling and Analysis of Water Pollutant in NSW (2004)	http://www.environment.nsw.gov.au/resources/legislation/approvedmethods-water.pdf

Lauren Evans

From: deb.alterator@crowland.nsw.gov.au on behalf of Lands Ministerials
<lands.ministerials@industry.nsw.gov.au>
Sent: Wednesday, 22 January 2020 2:50 PM
To: Lauren Evans
Subject: New Request for Advice - Mount Pleasant Optimisation Project (SSD-10418)
(Muswellbrook Shire)

DPIE - Crown Lands provided the following comments

If Crown land is involved in the proposal:

1. All Crown Land and Crown Roads within a Mining Lease must be subject to a Compensation Agreement issued under Section 265 of the Mining Act 1992, to be agreed and executed prior to any mining activity taking place and within 12 months of Project/ Modification Approval. The Compensation Agreement may include conditions requiring the Mining Lease Holder to purchase Crown land impacted on by mining activity.
2. All Crown Land and Crown Roads located within an Exploration Licence, where subject to exploration activity, must be subject to an Access Arrangement issued under Section 141 of the Mining Act 1992, to be agreed and executed prior to any exploration activity taking place

Lands Stakeholder Relations

Team telephone numbers: Rebecca Johnson, Principal Project Officer, 4920 5040; Kirstyn Goulding, Administration Officer - Customer Liaison, 4920 5058; Kim Fitzpatrick, Senior Project Officer, 4920 5015, Deb Alterator, Project Support Officer 4920 5172

Crown Lands | Department of Planning, Industry and Environment

[E lands.ministerials@industry.nsw.gov.au](mailto:lands.ministerials@industry.nsw.gov.au)

Level 4, 437 Hunter Street Newcastle NSW 2295

www.dpie.nsw.gov.au



The Department of Planning, Industry and Environment acknowledges that it stands on Aboriginal land. We acknowledge the traditional custodians of the land and we show our respect for elders past, present and emerging through thoughtful and collaborative approaches to our work, seeking to demonstrate our ongoing commitment to providing places in which Aboriginal people are included socially, culturally and economically.

This message is intended for the addressee named and may contain confidential information. If you are not the intended recipient, please delete it and notify the sender. Views expressed in this message are those of the individual sender, and are not necessarily the views of their organisation.

Division of Resources & Geoscience

Secretary's Environmental Assessment Requirements

for proposed significant state development applications requiring consultation
under Schedule 2 Part 2(3) of the Environmental Planning & Assessment Regulation 2000

Project	Mount Pleasant Optimisation Project
Reference Number:	DOC20/39143
Issue date of SEARs:	20 January 2020
Type of Approval:	Mining operation - open cut
Proponent:	MACH Energy Australia Pty Ltd and J.C.D Australia Pty Ltd
DA Number:	SSD 10418
LGA:	Muswellbrook
Mineral:	Coal

In preparing the environmental assessment requirements with respect to an application for State significant development, the Planning Secretary must consult relevant public authorities and have regard to the need for the requirements to assess any key issues raised by those public authorities.

This development may require an approval under the Mining Act 1992 to be issued by the Division of Resources & Geoscience. The proponent must apply to the Division for the relevant approval (mining lease) during the development assessment process, or once consent has been granted, and before the commencement of any mining or ancillary activity.

A development application under the Environmental Planning and Assessment Act 1979 must be approved before a mining lease can be granted. A mining lease will only be granted for activities specified in the development consent.

Environmental Impact Statement (EIS) requirements for mining

1. Project description

A comprehensive description of all aspects of the Project (including mineral extraction and mining purposes), including:

- (a) Location map showing the project area, mining titles, nearest town/s, major roads etc.
- (b) Status of all titles (including mining and exploration), and development consents in place and/or timeline to obtain necessary approvals.
- (c) Any relationships between the resource and existing mines or other infrastructure.
- (d) Nature of operation (e.g. underground, open cut) and ore mineral/s to be extracted.
- (e) Proposed life of mine and summary of production schedule.

2. Geology

- (a) A summary of the regional and local geology, including information of the stratigraphic unit or units within which the resource is located.
- (b) Document the physical dimensions of the coal resource. Plans and cross-sections showing the location of drill holes and the area proposed for extraction. Relevant supporting documentation such as drill logs should be included or appended.

3. Resource and reserve statement

The Proponent is to supply a copy of the most recent resource and/or reserve statement:

- (a) Include a full and updated resource/reserve statement outlining the tonnage of coal present in the subject area, that has been prepared in accordance with the current version of the Joint Ore Reserve Committee Code (JORC code) to a minimum of Indicated Resource level of confidence. It is preferred that at least some of the resource estimate is to a higher confidence level (measured/proved/probable).
- (b) The statement must include resource and reserve estimates for each coal seam proposed to be mined. The statement must include the coal quality parameters for each seam including product specifications and yields.

The Division understands that it may not be feasible to convert the majority of an Inferred Resource to Indicated (or higher) level of confidence. However, the Proponent needs to demonstrate that there are sufficient resources to support the majority of the initial life of mine production schedule. Any contribution from Inferred Resource(s) to the schedule needs to be justified.

4. Resource recovery and mine design

The Proponent is to supply a full assessment of resource recovery including:

- (a) Explain how the proposed mine plan and extraction method maximises resource recovery.
- (b) A summary of resources that will be sterilised or excluded, with justification.
- (c) List seams excluded from reserves (noting why each seam was excluded from reserve estimates).
- (d) Compare seams included/excluded in reserve estimates to those in nearby operations. If an underground operation, justify the selected working section.
- (e) List all economic, environmental, other constraints to the resource/reserve impacting the Project.

5. Geotechnical assessment

The Proponent is to supply a full geotechnical assessment supporting the mine design and method selected applicable to the proposed open cut operations.

6. Life of mine schedule

The Proponent must supply a life of mine production schedule for each year of operation of the mine and for the life of the Project. The production schedule is to include:

- (a) Details of run-of-mine ore, low-grade ore-mineralised waste and waste rock tonnage planned to be extracted for each year and for the life of the Project, and an estimate of the saleable product produced for each year and the life of the Project.
- (b) In terms of text, plans or charts, the EIS must clearly show the proposed extent and sequence of the development.

7. Project economics and target market

The Proponent is to supply an assessment of project economics including:

- (a) Coal price forecasts by coal type used by the Proponent. The Division requires these forecasts to analyse the Proponent's calculations of royalty value and export value.
- (b) Product tonnages split into market segment, for example, export/domestic and thermal/metallurgical coal. These estimates are necessary to arrive at total revenue value and royalty calculations. Include justification for market segment based on quality parameters.
- (c) CAPEX & OPEX necessary for the Project – broken down into the various sub-categories and equipment type.
- (d) Estimates of employment generation broken down into direct, indirect, ongoing, construction and contract workers.
- (e) Total royalty generated to the state over the life of the Project.
- (f) Relationship and interaction with other mines. How the Project impacts on the existing mine and surrounding mines.
- (g) Details on derivation/analysis of Run-of-Mine (ROM) production rate; to answer why this the optimum rate.

The Division understands that an estimate of product (tonnes) split into individual market segments is difficult to estimate at a point in time and is dependent on market conditions as the life of the Project progresses. The Division requires the Proponent to provide its best estimate of their market mix at the initial stages of the Project.

The above information should be summarised in the EIS, with full documentation appended. If deemed commercial-in-confidence, the resource summary included in the EIS must commit to providing the Division with full resource documentation separately via the Division's Assessment Coordination Unit.

Additional matters for attention

Resource and Economic Assessment

The Resource and Economic Assessment (REA) is designed to review the resource/reserve estimates stated in the submitted EIS and supporting material. The REA also examines whether the project will deliver significant social and economic benefits to NSW from the efficient development of the resource, by optimising resource recovery and mine design and minimising waste. It also aims to ensure an appropriate return to the state from developing the resource. This process commences two months prior to lodgement of the EIS, the proponent to contact the Assessment Coordination Unit.

Biodiversity offsets

The Division requests that the Proponent consider potential resource sterilisation in relation to any proposed biodiversity offsets areas. Biodiversity offsets have the potential to preclude access for future resource discovery and extraction and could also potentially permanently sterilise access to mineral resources.

The EIS must therefore clearly illustrate the location (including offsite locations) of any biodiversity offsets being considered for the project and their spatial relationship to known and potential mineral and construction material resources and existing mining & exploration titles.

The Division requests consultation with both the Geological Survey of NSW – Land Use Assessment team and holders of existing mining and exploration authorities affected by planned biodiversity offsets. Evidence of consultation should be included in the EIS.

Mine design, schedule and final land form

Justification for the proposed mine design, schedule and final landform (including final void/landform and rehabilitation outcomes and alternate options explored).

Mining Titles

As coal is a prescribed mineral under the *Mining Act 1992*, the Proponent is required to hold an appropriate mining title(s) from the Division in order to mine the mineral.

For ancillary mining activities as, in so far as the ancillary activities are to be carried out in connection with and in the immediate vicinity of a mining lease in respect of a mineral, the proponent is required to hold a Mining Lease for ancillary mining activities or an 'off title' designated ancillary mining activity as defined by clause 7 of the Mining Regulation 2016 (the Regulation).

The EIS for a project should clearly identify existing mineral titles, mineral title applications and the final proposed mining lease area(s) for the project site and areas surrounding the proposed project area and address the environmental impacts and management measures for the mining and mining purpose activities as licensed under the Mining Act 1992.

Where a proposal includes Crown Land the proponent is required to comply with the Commonwealth *Native Title Act 1993* and undertake the right to negotiate process for the Crown Lands within the current exploration licence area(s) if proof of extinguishment cannot be determined.

The Division notes that this Project is located within the existing operations area of Mining Lease 1645 (Act 1992) (ML 1645), ML1708 (Act 1992), ML1709 (Act 1992), ML1713 (Act 1992) and ML1750 (Act 1992) held by the proponent MACH Energy Australia Pty Ltd and J.C.D Australia Pty Ltd..

A development application under the Environmental Planning and Assessment Act 1979 must be approved before a mining lease can be granted. A mining lease will only be granted for activities specified in the development consent.

Application of section 380AA of the *Mining Act 1992* – restrictions on planning applications for coal mining and titles required to undertake mining



As coal is a prescribed mineral under the Act, the Proponent is required to hold appropriate mining titles from the Division to undertake mining.

In addition, section 380AA requires that an application for development consent (or modification to consent) to mine for coal cannot be made or determined unless the applicant is also the holder of a title under the Act or has the written consent of the holder of a title, where the parties are different.

Section 380AA(1) states:

An application for development consent, or for the modification of a development consent, to mine for coal cannot be made or determined unless (at the time it is made or determined) the applicant is the holder of an authority that is in force in respect of coal and the land where mining for coal is proposed to be carried out, or the applicant has the written consent of the holder of such an authority to make the application.

Based on current title information the Division advises that the Proponent holds the appropriate titles as required for mining operations as relating to the project and satisfies the requirements of section 380AA.

Position	Approval	Date
Approving Officer: Scott Anson Manager Assessment Coordination Resource Operations (02) 4063 6972		20 January 2020
Endorsing Officer: Dr David Blackmore Director Resource Assessment Resource Operations (02) 4063 6632		20 January 2020



DOC20/5159-4

Department of Planning, Infrastructure & Environment
Returned via the Major Projects Portal

Attention: Ms Lauren Evans

15 January 2020

Dear Ms Evans

**Secretary's Environmental Assessment Requirements
Mount Pleasant Optimisation Project (SSD 10418)**

I refer to the email from the Department of Planning, Industry and Environment (DPIE) to the Environment Protection Authority (EPA) dated 6 January 2020 seeking the EPA's Secretary's Environmental Assessment Requirements (SEARs) to assist with the preparation of an Environmental Assessment for the Mount Pleasant Optimisation Project (SSD 10418) at the Mount Pleasant Coal Mine.

Based on the information provided, the EPA understands that the Proponent is seeking to optimise operations at the Mount Pleasant Coal Mine by accessing additional run of mine coal reserves and extending the life of the mine from 2026 to 2048, among other changes. The Premises is already the subject of environment protection licence 20850 (Licence) issued under Chapter 3 of the *Protection of the Environment Operations Act 1997* (POEO Act) and therefore these SEAR's are only in relation to those matters that relate to the proposed optimisation.

The EPA has considered the proposal and provides at **Attachment A** the information it requires to properly assess the Proposal. The EPA's key information requirements for the Proposal must include an adequate description and assessment of:

1. Potential air quality impacts due to construction and operation;
2. Potential noise impacts due to construction and operation;
3. Potential impacts on water quality and site-wide water management; and
4. Waste management and disposal.

Given the location of the Proposal in relation to the town of Muswellbrook, particular attention will need to be paid to the assessment of cumulative impacts, especially for air quality.

The EPA has provided the appropriate guidance material to be considered (but not limited too) at **Attachment B**.

It is important that all assumptions and conclusions made in the environmental assessment are supported by adequate data. The proponent should also be aware that any commitments made in the environmental assessment may be formalised as approval conditions and/or environment protection licence conditions.

If you have any questions about this matter, please contact Matthew Corradin on 02 4908 6830 or by email to hunter.region@epa.nsw.gov.au.

Yours sincerely

MITCHELL BENNETT
Head Strategic Operations Unit
Environment Protection Authority

Encl: **Attachment A** – EPA's Recommended Secretary's Environmental Assessment Requirements
 Attachment B – Guidance Material

ATTACHMENT A – EPA’s Recommended Secretary’s Environmental Assessment Requirements – Mount Pleasant Optimisation Project (SSD 10418)

How to use these requirements

The EPA requirements have been structured in accordance with relevant guidelines, as follows. It is suggested that the EIS follow the same structure:

- A. Executive summary
- B. The proposal
- C. The location
- D. List of required approvals and licences
- E. Identification and prioritisation of all issues
- F. The environmental issues
- G. The mitigation measures
- H. Justification for the proposal and conclusion

The EIS should address the specific requirements outlined under each heading below and assess impacts in accordance with the relevant guidelines/standards at **Attachment B**.

A Executive summary

The document's executive summary should include a discussion of the proposed development, the key environmental risks, the identified mitigation measures, and an overall conclusion for the proposal.

B The proposal

The proposed development must be adequately described and should clearly state and refer to:

- a) the type, the nature and size of the proposed development, including proposed average and maximum annual extraction and production rates that are expected to occur;
- b) the type, the nature and amount of the processes and the products to be used, including the plant and equipment proposed for use, fuel and chemicals required and proposed methods for their transportation, storage, use and their emergency management provisions;
- c) the by-products produced and/or wastes produced (including the fate of such products);
- d) the staging and timing of the proposal (including any construction works and any plans for potential future expansion plans etc) and the proposed construction and operational hours (including and heavy vehicle movements);
- e) the anticipated benefits to relevant industry, community, etc; and
- f) the proposal's relationship to any other facility or industry both locally and abroad.

C The location

Provide an overview of the setting in which the proposed development is to take place in its local and regional environmental context including:

- a) the location of the proposed facility, its layout (including plant and equipment) and details of the surrounding environment (including land use zoning and appropriate maps/diagrams);
- b) the topography;
- c) meteorological data (e.g. temperature, wind (prevailing wind direction and strength), rainfall, evaporation, etc);
- d) surrounding land uses (including ownership details of any residence and/or land likely to be affected by the proposed facility and appropriate maps/diagrams);
- e) ecological information (vegetation, fauna, waters) and appropriate maps/diagrams; and
- f) availability of services and the accessibility of the site for passenger and freight transport.

D List of approvals and licences

Identify all approvals, licences or permits required to undertake the proposed development as well as those already obtained (including whether any changes are required i.e. scale of the activity if approval is given) and those to be obtained.

E Identification and prioritisation of issues / scoping of impact assessment

Identify a scoping risk assessment methodology, undertake a risk assessment, and identify and prioritise key issues.

F The environmental issues

1. Air

- Identify the existing air quality environment and identify applicable air quality goals (i.e. ground level concentrations for pollutants and odour assessment criteria) in line with relevant guidance/standards; and
- Identify potential air quality and odour sources and impacts (including point source emissions from any site-based plant and equipment and/or fugitive dust or other emissions) during both construction and operational stages and identify best practice mitigation measures (pollution control) and strategies to minimise point and/or fugitive and/or odour emissions/impacts (with proposed timing), including monitoring, in line with relevant guidance/standards; and
- Include an emission inventory of all sources of air emissions.

Note: this will require a detailed Air Quality Impact Assessment to be completed.

2. Noise

- Identify the existing noise environment and identify applicable noise goals in line with relevant guidance/standards; and
- Identify potential noise and vibration sources and impacts during both construction and operational stages and identify best practice mitigation measures (pollution control) and strategies to be incorporated for both stages to minimise noise and vibration emissions/impacts (with proposed timing), including validation monitoring, in line with relevant guidance/standards.

Note: this will require a detailed Noise Impact Assessment to be completed.

3. Water

- Identify the condition of the local catchment and those immediate areas on and around the proposed development e.g. soils, erosion potential, vegetation cover, etc; and
- Identify nearby water resources, the background water conditions (including river flow data, water flow/direction and quality data, the depth to groundwater, groundwater flow/gradient and quality data, reliance on water resources by surrounding users and by the environment) and relevant water quality objectives in line with relevant guidance/standards; and
- Identify existing impacts to water resources (including other industrial discharges); and
- Identify any water intakes, intake frequency and volumes related to the proposed development; and
- Identify any expected discharges (including stormwater), discharge quality, discharge frequency and volumes related to the proposed development; and
- Identify all practical measures that can be taken to prevent any expected discharges or an explanation of why any specific discharges cannot be prevented; and
- Identify potential impacts to surface and groundwater during both construction and operational stages and identify best practice mitigation measures (pollution control) and strategies to protect surface and groundwater resources, particularly erosion and sediment controls during the construction stage and the rehabilitation stage and the inclusion of permanent erosion and sediment controls where required and applicable; and
- Include a detailed water balance and discharge inventory; and
- Include an assessment of any mixing zones; and
- Include any proposed discharge limits.

Note: this will require a detailed Water Quality Assessment to be completed.

4. Land

- Identify if the soils in the area of the Proposal are contaminated or are acid forming (i.e. acid sulphate soils) and if so, identify best practice mitigation measures (pollution control) and strategies or remedial and/or disposal actions that will be required/undertaken if applicable in accordance with relevant guidance/standards; and
- Identify potential impacts to soils/land resources as a result of the proposed development and identify best practice mitigation measures (pollution control) and strategies that will be required/undertaken if applicable in accordance with relevant guidance/standards.

5. Waste

- Identify all waste types that will be generated as a result of the proposed development during both construction and operation, their classification and the ways in which they will be legally handled, stored, transported, reused, recycled or disposed of, including sampling/monitoring, record keeping, waste tracking, contingency measures and any other verification practices, in accordance with relevant guidance/standards; and
- Identify options and strategies for waste minimisation; reuse and recycling across all activities and processes during both construction and operational stages.

7. Storage and use of fuels / chemicals etc

- Identify all fuels/chemicals/products/dangerous goods to be stored/used onsite; and
- Identify adequate handling, storage, control and usage requirements for any fuels/chemicals/products/dangerous to be stored/used onsite.

8. Incident Management

Identify adequate incident management procedures to be established including notification requirements to the Appropriate Regulatory Authority and other relevant authorities for incidents that cause or have the potential to cause material harm to the environment (Part 5.7 of the POEO Act).

9. Cumulative impacts

- Identify the extent that the receiving environment is already stressed by existing development and background levels of emissions to which this proposal will contribute; and
- Identify the cumulative impacts of the proposed development in a local context.

10. Monitoring Programs

Include a detailed proposal of any noise, air, water, land, waste, meteorological etc monitoring during construction and operation to ensure and assumptions, predictions, goals, criteria etc are achieved. The proposal should include a detailed description of the monitoring locations, sample analysis methods and the level of reporting proposed.

G. Compilation of mitigation measures

- Outline how the proposal and its environmental protection measures would be implemented and managed in an integrated manner so as to demonstrate that the proposal is capable of complying with statutory obligations under EPA licences or approvals (e.g. outline of an environmental management plan).
- Include any Statement of Commitments to be made by the Proponent.

H. Justification for the proposed development and conclusion

Reasons should be included which justify undertaking the proposal in the manner proposed, having regard to the potential environmental impacts.

ATTACHMENT B – EPA’s Guidance Material (not exhaustive)

Title	Web address
<u>Legislation</u>	
<i>Environmental Planning and Assessment Act 1979</i>	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+203+1979+cd+0+N
<i>Protection of the Environment Operations Act 1997</i>	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+156+1997+cd+0+N
<i>Protection of the Environment Operations (Noise Control) Regulation 2017</i>	https://legislation.nsw.gov.au/#/view/regulation/2017/449
<i>Protection of the Environment Operations (Clean Air) Regulation 2010</i>	https://legislation.nsw.gov.au/#/view/regulation/2010/428
<i>Protection of the Environment Operations (Waste) Regulation 2014</i>	https://legislation.nsw.gov.au/#/view/regulation/2014/666
<i>Waste Avoidance and Resource Recovery Act 2001</i>	https://legislation.nsw.gov.au/#/view/act/2001/58
<i>Contaminated Land Management Act 1997</i>	http://www.legislation.nsw.gov.au/#/view/act/1997/140
<u>Licensing</u>	
Licensing Requirements	https://www.epa.nsw.gov.au/licensing-and-regulation/licensing
<u>Noise/Vibration</u>	
Interim Construction Noise Guideline (DECC, 2009)	https://www.epa.nsw.gov.au/your-environment/noise/industrial-noise/interim-construction-noise-guideline
Assessing Vibration: a technical guideline (DEC, 2006)	https://www.epa.nsw.gov.au/your-environment/noise/industrial-noise/assessing-vibration
Noise Policy for Industry (2017) and Implementation and Transitional arrangements for the Noise Policy for Industry (2017)	https://www.epa.nsw.gov.au/publications/noise/17p0524-noise-policy-for-industry https://www.epa.nsw.gov.au/publications/noise/17p0293-implement-transition-arrange-noise-pol-industry
NSW Road Noise Policy (DECCW, 2011)	http://www.epa.nsw.gov.au/resources/noise/2011236nswroadnoisepolicy.pdf
<u>Air/Odour</u>	
Approved methods for the Modelling and Assessment of Air Pollutants in NSW (2016)	http://www.epa.nsw.gov.au/resources/epa/approved-methods-for-modelling-and-assessment-of-air-pollutants-in-NSW-160666.pdf
Approved methods for the Sampling and Analysis of Air Pollutants in NSW (2007)	http://www.epa.nsw.gov.au/resources/air/07001amsaap.pdf
National Environment Protection (Ambient Air Quality) Measure	http://www.nepc.gov.au/nepms/ambient-air-quality
No EPA specific guidance material exists for the control of dust from construction sites. Consideration should be given to the POEO Act and the Local Government Air Quality Toolkit (DECC, 2007)	http://www.epa.nsw.gov.au/air/lgaqt.htm
Technical Framework - Assessment and Management of Odour from Stationary Sources in NSW (DEC, 2006) and	http://www.epa.nsw.gov.au/air/odour.htm http://www.epa.nsw.gov.au/air/odour.htm

Title	Web address
Technical Notes - Assessment and Management of Odour from Stationary Sources in NSW (DEC, 2006)	
<u>Water/Soils</u>	
ANZECC Guidelines for Fresh and Marine Water Quality (2018)	https://www.waterquality.gov.au/guidelines/anz-fresh-marine
NSW Water Quality and River Flow Objectives	http://www.environment.nsw.gov.au/ieo/index.htm
Applying Goals for Ambient Water Quality Guidance for Operations Officers – Mixing Zones	http://deccnet/water/resources/AWQGuidance7.pdf
Approved Methods for the Sampling and Analysis of Water Pollutant in NSW (2004)	https://www.epa.nsw.gov.au/-/media/epa/corporate-site/resources/water/approvedmethods-water.pdf
Soil and Landscape Issues in Environmental Impact Assessment (DLWC 2000)	https://www.shop.nsw.gov.au/publication/soil-and-landscape-issues-in-environmental-impact-assessment-technical-report-no-34-1324-6860-839
Managing urban stormwater: soils and construction, vol. 1 (Landcom, 2004) and Addendum Publications (Various)	http://www.environment.nsw.gov.au/stormwater/publications.htm
Floodplain Development Manual (DIPNR, 2005)	http://www.environment.nsw.gov.au/floodplains/manual.htm
Landslide Risk Management (2007)	http://www.australiangeomechanics.org/resources/downloads/
Site Investigations for Urban Salinity (DLWC, 2002)	http://www.environment.nsw.gov.au/resources/salinity/booklet3siteinvestigationsforurbansalinity.pdf
Dryland Salinity Resources (Various)	http://www.environment.nsw.gov.au/salinity/solutions/urban.htm
<u>Contaminated Sites Assessment and Remediation</u>	
Contaminated Land – EPA website	https://www.epa.nsw.gov.au/your-environment/contaminated-land
Managing land contamination: Planning Guidelines – SEPP 55 Remediation of Land	http://www.epa.nsw.gov.au/clm/planning.htm
Guidelines for the NSW Site Auditor Scheme – 3rd Edition (EPA, 2017)	https://www.epa.nsw.gov.au/publications/contaminatedland/17p0269-guidelines-for-the-nsw-site-auditor-scheme-third-edition
Guidelines for Consultants Reporting on Contaminated Sites (EPA, 2000)	http://www.epa.nsw.gov.au/resources/clm/20110650consultantsguidelines.pdf
Sampling Design Guidelines (EPA, 1995)	http://www.epa.nsw.gov.au/resources/clm/95059samppgdline.pdf
National Environment Protection (Assessment of Site Contamination) Measure	http://www.nepc.gov.au/nepms/assessment-site-contamination
<u>Waste</u>	
NSW Waste Avoidance and Resource Recovery Strategy 2014-2021	http://www.epa.nsw.gov.au/wastestrategy/warr.htm
Waste Classification Guidelines – 4 Parts (EPA, 2014)	http://www.epa.nsw.gov.au/wasteregulation/classify-waste.htm

Title	Web address
<u>Chemical and Fuel Storage</u>	
Storage and Handling of Dangerous Goods – Code of Practice (WorkCover, 2005)	http://www.safework.nsw.gov.au/_data/assets/pdf_file/0005/50729/storage-handling-dangerous-goods-1354.pdf

4 February 2020

Team Leader
Energy and Resource Assessments
Department of Planning and Environment
GPO Box 39
Sydney NSW 2001

Dear Ms Evans,

Mount Pleasant Optimisation Project (SSD 10418)
Request for Input into Secretary's Environmental Assessment Requirements

I refer to your email dated 6 January 2020, requesting Council's input to the Secretary's Environmental Assessment Requirements (SEARs) for the above project. Council thanks you for the opportunity to provide comments.

Based on the review of the applicant's Scoping Report, Council requests that the EIS assesses:

1. Traffic and the Local Road Network

1.1 A traffic impact assessment should be prepared in relation to the project. The Assessment should investigate the effect of additional traffic movements associated with the construction, operational and decommissioning phases of the project on the local and regional road network.

1.2 The Traffic Assessment should review and incorporate strategies and recommendations contained in the *Muswellbrook Mine Affected Roads Network Review* (Bitzios and Northrop; 2019). The Project will increase the life of the Mt Pleasant Mine by 22 years, will result in the extraction of an additional 250 million tonnes of ROM and effectively double the workforce, all during the time that the Bengalla, Mt Arthur and Mangoola Mines will also be increasing the life of their mines (and the Muswellbrook West Coal Mine Project will potentially seek approval), some also seeking approval to modifying the local road network. The cumulative impact will be:

- additional traffic movements on the road network for a longer period of time,
- an overall increase in vehicle kilometres travelled and increased CO2 emissions resulting from vehicles traveling to and from the site.

1.3 Council considers that Mt Pleasant Mine should make a commitment to constructing the Bengalla Link Rd to Wybong Road link recommended in the Road Network Map contained in the *Muswellbrook Mine Affected Roads Network Review*.

2. Dust and Air Quality

2.1 A cumulative air pollution analysis should be prepared to assess the total concentration of air pollutants from this Project, other mines, ash dams and coal-fired power stations, quarries and agriculture in the Region.

2.2 Air quality issues in the early morning hours are very visible for much of the year. Council is informed that this occurs as a result of a strong inversion that forms over the Muswellbrook and Singleton council areas, trapping dust and other pollutants.

2.3 This naturally occurring phenomenon seems to be well known by State Agencies. It is Council's view that the 24 hour averaging period for air pollution monitoring has the unintended consequence of obscuring issues of elevated dust levels in the late evenings and early morning hours for much of the year, resulting in unacceptable health impacts for local residents and the equine industry.

2.4 The EIS should explore all feasible, real-time air quality monitoring protocols that will address the inversion issue better than the 24 hour averaging protocol, controlling dust generating activity in the early evenings and mornings periods when necessary, but also reducing the down time the Mine experiences as a result of the 24 hour averaging protocol.

3. Visual Impacts

3.1 A detailed assessment of the likely visual impacts of the development (before, during and post-mining) on private landowners in the vicinity of the development and key vantage points in the public domain, including vehicles traveling along the New England Highway, Wybong Road and Kyuga Road.

3.2 Identification of mitigation measures to minimise visual impacts (including lighting) of the development.

4. Rehabilitation

4.1 Council has a keen interest in ensuring that the rehabilitation of mine sites is completed to high standards, in line with industry best practice and to support post mining land uses. The EIS should:

- Give consideration to the employment of micro-relief to the rehabilitation of the site, in line with the principles of Geofluv design, to ensure long-term site stability and erosion control, and to create a more natural looking landscape post development;
- Consider a design/mining sequence that will result in no final voids; and
- Provide a detailed description of the progressive rehabilitation measures that would be implemented over the life of the development and how this rehabilitation would be integrated with surrounding mines and land uses.

5. Biodiversity

5.1 Provide accurate predictions of any vegetation to be cleared on site;

5.2 Provide an assessment of the likely biodiversity impacts of the development, paying particular attention to threatened species, populations and ecological communities and groundwater dependent ecosystems, undertaken in accordance with the Biodiversity

Assessment Method and documented in a Biodiversity Development Assessment Report or, subject to agreement with OEH and the Department, undertaken in accordance with the Upper Hunter Strategic Assessment (UHSA);

5.3 Assess the likely impacts of the development on listed threatened species and communities under the Commonwealth Environment Protection and Biodiversity Conservation Act 1999 (see Attachment 4);

5.4 Provide a strategy to offset any residual impacts of the development in accordance with the offset rules under the Biodiversity Offsets Scheme;

6. Water

6.1 Provide an assessment of the likely impacts of the development on the quantity and quality of existing surface water resources including a detailed assessment of proposed water discharge quantities and quality against receiving water quality and flow objectives;

6.2 Provide an assessment of the likely impacts of the development on groundwater resources,

6.3 Provide an assessment of the likely impacts of the development on aquifers, watercourses, riparian land, water-related infrastructure, and other water users, including cumulative impacts of water licences issued to the Project, other mines, and power stations that will permanently remove water from the catchment. Each mine says they hold sufficient water licences to cover “loss of water”. But the loss is permanent, and if the water sharing regime needs to change in the broader catchment for societal, ecological, or climate change reasons, or to satisfy the requirements for emerging industries, the water loss due to mines will place limitations on the ability to change the water sharing regime.

7. Economic Opportunities

7.1 Council is interested in ensuring the local community is a beneficiary of reported economic and employment opportunities. Accordingly it is requested that the application considers measures that can be put in place to ensure that the project supports local jobs and businesses and results in opportunities for local people to gain skills in the construction, project management and various Trades. Apprenticeships for local young people would be welcomed.

8. Housing and Community function –

8.1 The Muswellbrook Chamber of Commerce and local Estate Agencies indicate that investors have a strong presence in the local housing market, buying into the market for the high rental returns that can be gained from shift working miners who drive in and out of the area based on shift working patterns, returning to their families in the Lower Hunter when “off”. This is making it difficult for owner/occupiers to enter the market. The casualization of the mine workforce is also having impacts on the ability of some households to secure loans from financial institutions to purchase housing.

8.2 While Council has ensured there is sufficient zoned land for residential housing demand, having subdivisions and housing constructed is dependent on market forces and the initial costs of constructing infrastructure to enable subdivisions to occur.

8.3 A portion of the Castlerock community has connections with the Wybong community. Mining has reduced the population living in rural areas west of Muswellbrook. The

cumulative impact is evidenced in a reduction in community volunteering and participation on local sports teams.

8.4 The EIS should assess and make recommendations on steps that can be taken to reduce the impacts mining has on local communities, housing affordability and the ongoing vibrancy/economic sustainability of Muswellbrook and Denman in particular.

9. Consolidation of Approvals

9.1 The Mt Pleasant Mine site has been the subject of a number of applications and modifications. The EIS should provide details on how it is intended to consolidate these into a single approval, combine the rehabilitation requirements of the different approvals and surrender old approvals.

The above comments are not intended as an exhaustive list of assessment considerations or Council comments in relation to the project, but to guide the preparation of the studies required for the project.

Council appreciates the opportunity to comment and would be pleased to provide additional information if requested.

Yours faithfully



Sharon Pope
Executive Manager Environmental and Planning Services
sharon.pope@muswellbrook.nsw.gov.au

Team Leader
Resource Assessments
Department of Planning, Industry and Environment
GPO Box 39
Sydney NSW 2001
Attn: Lauren Evans

Dear Lauren Evans

Mount Pleasant Optimisation Project (SSD-10418): Request for Resources Regulator Secretary's Environmental Assessment Requirements

Dear Lauren Evans,

I refer to correspondence dated 6 January 2020 inviting the Resources Regulator to provide Secretary's Environmental Assessment Requirements (SEARs) for the Mount Pleasant Optimisation Project SSD-10418.

The Mining Act Inspectorate within the Resources Regulator has responsibility for providing strategic advice for environmental issues pertaining to the proposed development in so far as they relate to or affect rehabilitation.

Mine Safety Operations within the Resources Regulator is responsible for ensuring mine operators manage the risk to worker health and safety through compliance with the *Work Health and Safety (Mines and Petroleum Sites) Act 2013* and the subordinate mining legislation. In particular the effective management of risk associated with the principal hazards as specified in the *Work Health and Safety (Mines and Petroleum Sites) Regulation 2014*.

Development Details and Assessment

The proposed Mount Pleasant Optimisation Project is located approximately 3 kilometres north-west of Muswellbrook, NSW.

MACH Energy Mount Pleasant Operations Pty Ltd has submitted a Scoping Report and request for SEARS in support of the Mount Pleasant Optimisation Project that proposes extraction of additional coal reserves within Mount Pleasant Operation Mining Leases (ML) and an increase in the rate of coal extraction, without significantly increasing the total disturbance footprint.

The development application proposes to:

- Increased open cut extraction within the Mount Pleasant Operation MLs by mining of additional coal reserves, including lower seams in North Pit;
- A staged increase in extraction, handling and processing of ROM coal up to 21 million tonnes per annum (Mtpa);

- Staged upgrades to the existing Coal Handling and Preparation Plant (CHPP) and coal handling infrastructure;
- Rail transport of up to approximately 17 Mtpa of product coal to domestic and export customers;
- Upgrades to infrastructure;
- Construction and operation of new water management and water storage infrastructure in support of the mine;
- CHPP reject dewatering facilities to allow co-disposal of fine rejects with waste rock;
- Development of an integrated waste rock emplacement landform; and
- Extension of the time limit on mining operations from 2026 to 22 December 2048.

Compliance Operations Response

The Mining Act Inspectorate has reviewed the application and recommends that the standard mining development rehabilitation SEARs be applied to this development (see attached).

Mine Safety Operations Response

Mine Safety Operations have not identified any risk that would require comment in relation to this matter.

If you require additional information, please contact the Resources Regulator on 1300 814 609 (Option 2, then 5), or via email at nswresourcesregulator@service-now.com.

Yours sincerely,

Peter Ainsworth
Manager Environmental Operations
Mining Act Inspectorate
Resources Regulator
NSW Department of Planning, Industry & Environment

20 January 2020

ADVICE RESPONSE

Mining Development Rehabilitation Standard SEARs

Post-mining land use

- (a) Identification and assessment of post-mining land use options;
- (b) Identification and justification of the preferred post-mining land use outcome(s), including a discussion of how the final land use(s) are aligned with relevant local and regional strategic land use objectives;
- (c) Identification of how the rehabilitation of the project will relate to the rehabilitation strategies of neighbouring mines within the region, with a particular emphasis on the coordination of rehabilitation activities along common boundary areas;

Rehabilitation objectives and domains

- (d) Inclusion of a set of project rehabilitation objectives and completion criteria that clearly define the outcomes required to achieve the post-mining land use for each domain. Completion criteria should be specific, measurable, achievable, realistic and time-bound. If necessary, objective criteria may be presented as ranges;

Rehabilitation Methodology

- (e) Details regarding the rehabilitation methods for disturbed areas and expected time frames for each stage of the rehabilitation process;
- (f) Mine layout and scheduling, including maximising opportunities for progressive final rehabilitation. The final rehabilitation schedule should be mapped against key production milestones (i.e. ROM tonnes) of the mine layout sequence before being translated to indicative timeframes throughout the mine life. The mine plan should maximise opportunities for progressive rehabilitation;

Conceptual Final Landform Design

- (g) Inclusion of a drawing at an appropriate scale identifying key attributes of the final landform, including final landform contours and the location of the proposed final land use(s);

Monitoring and Research

- (h) Outlining the monitoring programs that will be implemented to assess how rehabilitation is trending towards the nominated land use objectives and completion criteria;
- (i) Details of the process for triggering intervention and adaptive management measures to address potential adverse results as well as continuously improve rehabilitation practices;
- (j) Outlining any proposed rehabilitation research programs and trials, including their objectives. This should include details of how the outcomes of research are considered as part of the ongoing review and improvement of rehabilitation practices;

Post-closure maintenance

- (k) Description of how post-rehabilitation areas will be actively managed and maintained in accordance with the intended land use(s) in order to demonstrate progress towards meeting the rehabilitation objectives and completion criteria in a timely manner;

Barriers or limitations to effective rehabilitation

(l) Identification and description of those aspects of the site or operations that may present barriers or limitations to effective rehabilitation, including:

- i. evaluation of the likely effectiveness of the proposed rehabilitation techniques against the rehabilitation objectives and completion criteria;
- ii. an assessment and life of mine management strategy of the potential for geochemical constraints to rehabilitation (e.g. acid rock drainage, spontaneous combustion etc.), particularly associated with the management of overburden/interburden and reject material;
- iii. the processes that will be implemented throughout the mine life to identify and appropriately manage geochemical risks that may affect the ability to achieve sustainable rehabilitation outcomes;
- iv. a life of mine tailings management strategy, which details measures to be implemented to avoid the exposure of tailings material that may cause environmental risk, as well as promote geotechnical stability of the rehabilitated landform; and
- v. existing and surrounding landforms (showing contours and slopes) and how similar characteristics can be incorporated into the post-mining final landform design. This should include an evaluation of how key geomorphological characteristics evident in stable landforms within the natural landscape can be adapted to the materials and other constraints associated with the site.

(m) Where a void is proposed to remain as part of the final landform, include:

- i. a constraints and opportunities analysis of final void options, including backfilling, to justify that the proposed design is the most feasible and environmentally sustainable option to minimise the sterilisation of land post-mining;
- ii. a preliminary geotechnical assessment to identify the likely long term stability risks associated with the proposed remaining high wall(s) and low wall(s) along with associated measures that will be required to minimise potential risks to public safety; and
- iii. outcomes of the surface and groundwater assessments in relation to the likely final water level in the void. This should include an assessment of the potential for fill and spill along with measures required be implemented to minimise associated impacts to the environment and downstream water users.

(n) Consideration of the controls likely to be required to either prevent or mitigate against rehabilitation risks as part of the closure plan for the site;

(o) Where an ecological land use is proposed, demonstrate how the revegetation strategy (e.g. seed mix, habitat features, corridor width etc.) has been developed in consideration of the target vegetation community(s);

(p) Where the intended land use is agriculture, demonstrate that the landscape, vegetation and soil will be returned to a condition capable of supporting this; and

(q) Consider any relevant government policies¹.

¹ The following government policies should be considered when addressing rehabilitation issues:

- Mine Rehabilitation (Leading Practice Sustainable Development Program for the Mining Industry, 2006)
- Mine Closure and Completion (Leading Practice Sustainable Development Program for the Mining Industry, 2006)
- Strategic Framework for Mine Closure (ANZMEC-MCA, 2000)



20 January 2020

Department of Planning, Industry & Environment
Major Project Assessments
GPO Box 39
SYDNEY NSW 2001

Attention: Lauren Evans

**SEARS REQUEST – MOUNT PLEASANT OPTIMISATION PROJECT
SSD 10418**

Transport for NSW (Transport) advises that legislation to bring Roads and Maritime Services and Transport together as one organisation came into effect on 1 December 2019 so we can deliver more integrated transport services across modes and better outcomes to customers and communities across NSW. Other than a name change from Roads and Maritime to Transport, it's business as usual and you can continue to enjoy the same service you do today.

Reference is made to Department of Planning, Industry and Environment's email dated 6 January 2020, requesting Transport requirements under Schedule 2 of the *Environmental Planning and Assessment Regulation 2000*.

Transport's primary interests are in the road network, traffic and broader transport issues. In particular, the efficiency and safety of the classified road network, the security of property assets and the integration of land use and transport.

Transport has reviewed the Mount Pleasant Optimisation Project Scoping Report by Mach Energy, dated December 2019. It is understood that the proposal be to extract an additional 250 million tonnes of coal by extending the Mount Pleasant mine life from 2026 to 2048. The extraction would be a staged increase to 21 million tonnes per annum.

Transport for NSW response & requirements

Transport recommends that the Environmental Impact Statement (EIS) should refer to the following guidelines with regard to the traffic and transport impacts of the proposed development:

- Road and Related Facilities within the Department of Planning EIS Guidelines, and,

- Section 2 Traffic Impact Studies of Transport for NSW's *Guide to Traffic Generating Developments 2002*.

A traffic and transport study shall be prepared in accordance with the Roads and Maritime Services NSW's *Guide to Traffic Generating Developments 2002* and is to include (but not be limited to) the following:

- Assessment of all relevant vehicular traffic routes and intersections for access to / from the subject properties.
- Current traffic counts for all of the traffic routes and intersections.
- The anticipated additional vehicular traffic generated from both the construction and operational stages of the project, including the additional work force required and any haulage impacts on the road network.
- The distribution on the road network of the trips generated by the proposed development. It is requested that the predicted traffic flows are shown diagrammatically to a level of detail sufficient for easy interpretation.
- Consideration of the traffic impacts on existing and proposed intersections, and the capacity of the local and classified road network to safely and efficiently cater for the additional vehicular traffic generated by the proposed development during both the construction and operational stages. The traffic impact shall also include the cumulative traffic impact of other proposed developments in the area.
- Identify the necessary road network infrastructure upgrades that are required to maintain existing levels of service on both the local and classified road network for the development. In this regard, preliminary concept drawings shall be submitted with the EIS for any identified road infrastructure upgrades. However, it should be noted that any identified road infrastructure upgrades will need to be to the satisfaction of Transport for NSW and Council.
- Traffic analysis of any major / relevant intersections impacted, using SIDRA or similar traffic model, including:
 - Current traffic counts and 10 year traffic growth projections
 - With and without development scenarios
 - 95th percentile back of queue lengths
 - Delays and level of service on all legs for the relevant intersections
 - Electronic data for Transport for NSW review.
- Any other impacts on the regional and state road network including consideration of pedestrian, cyclist and public transport facilities and provision for service vehicles.

On determination of this matter, please forward a copy of the SEARs to Transport for record and / or action purposes. Should you require further information please contact Marc Desmond on

0475 825 820 or by emailing development.hunter@rms.nsw.gov.au.

Yours sincerely

A handwritten signature in black ink, appearing to read 'P. Marler', with a large loop at the start and a trailing flourish.

Peter Marler
Manager Land Use Assessment
Hunter Region



OUT20/275

Lauren Evans
Planning and Assessment Group
NSW Department of Planning, Industry and Environment

lauren.evans@planning.nsw.gov.au

Dear Ms Evans

**Mount Pleasant Optimisation Project (SSD-10418)
Comment on the Secretary's Environmental Assessment Requirements (SEARs)**

I refer to your email of 6 January 2020 to the Department of Planning, Industry and Environment (DPIE) Water and the Natural Resources Access Regulator (NRAR) about the above matter.

The following advice for you to consider is from DPIE Water and NRAR. Please note the Department of Primary Industries (DPI) and Crown Lands now provide a separate response.

DPIE – Water and NRAR

The SEARS should include:

- The identification of an adequate and secure water supply for the life of the project. This includes confirmation that water can be sourced from an appropriately authorised and reliable supply. This is also to include an assessment of the current market depth where water entitlement is required to be purchased.
- A detailed and consolidated site water balance.
- Assessment of impacts on surface and ground water sources (both quality and quantity), related infrastructure, adjacent licensed water users, basic landholder rights, watercourses, riparian land, and groundwater dependent ecosystems, and measures proposed to reduce and mitigate these impacts.
- Proposed surface and groundwater monitoring activities and methodologies.
- Consideration of relevant legislation, policies and guidelines, including the NSW Aquifer Interference Policy (2012), the Guidelines for Controlled Activities on Waterfront Land (2018) and the relevant Water Sharing Plans (available at <https://www.industry.nsw.gov.au/water>).

Any further referrals to DPIE – NRAR & Water can be sent by email to:

landuse.enquiries@dpi.nsw.gov.au.

Any further referrals to DPI & Crown Lands can be sent by email to: dpi.cabinet@dpi.nsw.gov.au & lands.ministerials@industry.nsw.gov.au respectively.

Yours sincerely

Alistair Drew
Policy Officer, Assessments
Water – Strategic Relations
16 January 2020



Mr Chris Lauritzen
General Manager – Resource Development
MACH Energy Australia Pty Ltd

Via email: Chris.Lauritzen@machenergy.com.au

02/10/2020

Dear Mr Lauritzen,

**Supplementary Environmental Assessment Requirements
Mount Pleasant Optimisation Project (SSD 10418)**

I refer to the Planning Secretary's Environmental Assessment Requirements (SEARs) for the above Project dated 17 February 2020.

On 26 August 2020, the Project was determined to be a controlled action under Section 75 of the Commonwealth *Environmental Protection and Biodiversity Conservation Act 1999* (EPBC Act). The Commonwealth Department of Agriculture, Water and the Environment has also determined that the Project will be assessed under the Bilateral Agreement between the NSW and Commonwealth Governments.

Accordingly, the Planning Secretary has issued supplementary SEARs to incorporate relevant matters for assessment under the EPBC Act. A copy of the supplementary SEARs are enclosed and should be read as Attachment 3 to the existing SEARs dated 17 February 2020.

If you have any enquiries about these requirements, please contact Lauren Evans on the details listed above.

Yours sincerely

A handwritten signature in black ink, appearing to read 'M Sprott'.

Matthew Sprott
Director Resource Assessments
as delegate for the Planning Secretary

ATTACHMENT 3

COMMONWEALTH DEPARTMENT OF AGRICULTURE, WATER AND THE ENVIRONMENT - ENVIRONMENTAL ASSESSMENT REQUIREMENTS

Guidelines for preparing assessment documentation relevant to the EPBC Act for proposals being assessed under the Bilateral Agreement

Mount Pleasant Optimisation Project (EPBC 2020/8735) (SSD 10418)

Introduction

On 26 August 2020, a delegate of the Commonwealth Minister for the Environment determined that the Mount Pleasant Optimisation Project is a controlled action under section 75 of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). The EPBC Act controlling provisions for the proposed action are:

- listed threatened species and communities (sections 18 and 18A); and
- a water resource, in relation to coal seam gas development and large coal mining development (section 24D & section 24E).

The delegate also decided that the proposed action will be assessed in a manner specified in Schedule 1 to the *Bilateral Agreement made under section 45 of the EPBC Act relating to environmental assessment* (2015).

These guidelines provide information on environmental assessment requirements for the proposed action.

Matters of National Environmental Significance

All matters of national environmental significance (MNES) protected under the triggered controlling provisions are potentially relevant, however the Department of Agriculture, Water and the Environment (DAWE) considers that there is likely or potential to be a significant impact on the following:

- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland – Critically Endangered
- Swift Parrot (*Lathamus discolor*) – Critically Endangered
- Regent Honeyeater (*Anthochaera phrygia*) – Critically Endangered
- Striped Legless Lizard (*Delpa impar*) – Vulnerable
- Water Resources

In addition, without further detailed assessment of potential impacts of the proposed action, DAWE considers that there is a real chance or possibility that the proposed action will significantly impact the following protected matters:

- Austral Toadflax (*Thesium australe*) – Vulnerable
- Slaty Red Gum (*Eucalyptus glaucina*) – Vulnerable

Please note that this may not be a complete list as additional impacts may be identified during the preparation of the environmental impact statement. In this regard, it is the responsibility of the applicant to undertake an analysis of the significance of the relevant impacts and ensure that all protected matters that are likely to be significantly impacted are assessed for the Commonwealth Minister's consideration.

Key Issues

The EIS must include the following:

- A detailed water management plan for the proposed project with sufficiently detailed information on operational water requirements of the project and associated infrastructure;

- a detailed assessment of potential groundwater impacts, especially if data and modelling suggests impacts may propagate to the Hunter alluvium and flow in the Hunter River;
- the use of baseline or pre-existing data to inform the groundwater models, surface water models, and to inform any GDE assessments, including:
 - a numerical ground water model which has appropriate resolution to determine impacts to rivers and creeks in the project area, including the Hunter River, Sandy Creek, Rosebrook Creek, Muscle Creek and other unnamed drainage lines both upstream and downstream of the proposed project area;
 - a hydrogeological conceptualisation to identify areas of shallow groundwater and potential areas of groundwater discharge;
 - consideration of the methods provided in the 2019 report *Information Guidelines Explanatory Note: Assessing groundwater-dependent ecosystems*, by Doody TM, Hancock PJ, Pritchard JL. For more information on how to assess groundwater use by vegetation (especially during dry periods), the guidelines are available at: <http://www.iesc.environment.gov.au/system/files/resources/422b5f66-dfba-4e89-adda-b169fe408fe1/files/information-guidelines-explanatory-note-assessing-groundwater-dependent-ecosystems.pdf>;
 - mapping of vegetation, seasonal depths to groundwater, and shallow groundwater drawdown maps overlaid to identify areas of potential GDEs, supported by monitoring data gathered near the regions occupied by potential GDEs, with the shallow groundwater monitoring locations also plotted on the maps;
 - ecohydrological conceptualisations and models that integrate results from hydrogeological, hydrological, geomorphological and ecological investigations at a spatial and temporal scale that is suitable for predicting potential impacts to GDEs and pathways of likely effects of the proposed development; and
 - proposed mitigation strategies (and measured to monitor the effectiveness of those strategies), based on the potential impact pathways identified above;
- the use of baseline or pre-existing surface and groundwater water quality data to establish water quality monitoring guidelines at the site, with particular attention given to mine-affected water entering and leaving the Bengalla mine site's controlled release dam when establishing an updated water quality monitoring regime as part of the Water Management Plan required above.
- consideration of closure and rehabilitation activities that will be undertaken and what the final landform will be at the end of mining to avoid long-term impacts to groundwater and surface water resources at the site; and
- an assessment of cumulative impacts identifying the extent to which the impacts from the proposed action interact with impacts from neighbouring approved coal mines.

General Assessment Requirements

The EIS must address the matters outlined in Schedule 4 of the *Environment Protection and Biodiversity Conservation Regulations 2000* and the matters outlined below in relation to the controlling provisions.

For each of the EPBC Act-listed threatened species and ecological communities impacted by the proposed action, the EIS must provide the following information:

- Survey results, including details of the scope, timing and methodology for studies or surveys used and how they are consistent with (or justification for divergence from) published Commonwealth guidelines and policy statements. For ecological communities, this includes any condition thresholds provided in the listing advice or approved conservation advice.

- A description and quantification of habitat in the study area (including suitable breeding habitat, suitable foraging habitat, important populations and habitat critical for survival), with consideration of, and reference to, any relevant Commonwealth guidelines and policy statements including species and communities listing advice, conservation advice, recovery plans and threat abatement plans.
- Maps displaying the above information (specific to EPBC matters) overlaid with the proposed action. It is acceptable, where possible, to use the mapping and assessment of Plant Community Types (PCTs) and the species surveys prescribed by the BAM as the basis for identifying EPBC Act-listed species and communities. The EIS must clearly identify which PCTs are considered to align with habitat for the relevant EPBC Act-listed species or communities, and provide individual maps for each species or community.
- A description of the nature, geographic extent, magnitude, timing and duration of any likely direct, indirect and consequential impacts on any relevant EPBC Act-listed species and communities. It must clearly identify the location and quantify the extent of all impact areas to each relevant EPBC Act-listed species or community.
- Information on proposed avoidance and mitigation measures to deal with the impacts of the action, and a description of the predicted effectiveness and outcomes that the avoidance and mitigation measures will achieve.
- Quantification of the offset liability for each species and community significantly impacted, and information on the proposed offset strategy, including discussion of the conservation benefit for each species and community, how offsets will be secured, and the timing. It is a requirement that offsets directly contribute to the ongoing viability of the specific protected matter impacted by a proposed action i.e. 'like-for-like'.

Note: Like-for-like includes protection of native vegetation that is the same ecological community or habitat being impacted (preferably in the same region where the impact occurs), or funding to provide a direct benefit to the matter being impacted e.g. threat abatement, breeding and propagation programs or other relevant conservation measures.