APPENDIX 3
Regulatory Correspondence

Planning Services
Resource Assessments
Contact: Megan Dawson
Phone: 9274 6391
Email: megan.dawson@planning.nsw.gov.au

Mr Brian Pease
Project Manager
Mangoola Coal Operations Pty Ltd
PO Box 495
Muswellbrook, NSW 2333

Dear Mr Pease

Mangoola Coal Continued Operations Project (SSD 8642)
State Significant Development - Reissued Environmental Assessment Requirements

I refer to your letter of 22 November 2018 requesting the reissue of the Planning Secretary's Environmental Assessment Requirements (SEARs) for the Mangoola Coal Continued Operations Project (SSD 8642) following the Commonwealth's controlled action determination under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). I note that SEARs were originally issued on 22 August 2017 and that supplementary SEARs were issued on 13 September 2017.

On 21 January 2019, a delegate for the Minister of the Environment and Energy determined the project to be a controlled action under the EPBC Act. On 14 February 2019, the Commonwealth Government confirmed that the proposed action will be assessed under the State's accredited assessment process under Part 4 of the NSW *Environmental Planning and Assessment Act 1979* in accordance with the bilateral agreement between the two governments. As such, I am now providing you with additional SEARs (see Attachment 3) to ensure that Commonwealth matters are appropriately addressed in your Environmental Impact Statement.

The Department has also taken the opportunity to update the SEARs to reflect recent policy changes, except for the biodiversity assessment requirements. The project can continue to be assessed under the *NSW Framework for Biodiversity Assessment* as it is considered a 'pending planning application' under the *Biodiversity Conservation (Savings and Transitional) Regulation 2017*.

These SEARs are based on the information you have provided to date and on agency advice (see Attachment 2, which remains unchanged from 22 August 2017). You must have regard to these comments in the preparation of the EIS.

Please contact the Department at least one month before you plan to submit the development application and EIS for the project. 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.

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

Yours sincerely

15.2.19

Howard Reed
Director Resource Assessments
as delegate for the Planning Secretary

Planning Secretary's Environmental Assessment Requirements
State Significant Development

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 8642
Proposal	The Mangoola Coal Continued Operations Project, which involves: • continuation of open cut mining at Mangoola Coal Mine (currently approved under PA 06_0014); • development of a new open cut pit north of the existing mine to extract approximately 52 million tonnes (Mt) of run-of-mine coal over a period of approximately 8 years; • extension to the approved mine life to 2030; • continued use of existing mine infrastructure and facilities; • establishment of additional out-of-pit emplacement areas; • construction of a haul road overpass over Big Flat Creek and Wybong Road; • realignment of a section of Wybong Post Office Road; and • progressive rehabilitation of the site.
Location	Wybong Road, Wybong
Applicant	Mangoola Coal Operations Pty Ltd
Date of Issue	15 February 2019
General Requirements	The Environmental Impact Statement (EIS) for the development must comply with the requirements of Schedule 2 of the *Environmental Planning and Assessment Regulation 2000.* In particular, the EIS must include: • a stand-alone executive summary; • a full description of the development, including: – 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 other 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: – 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 and industry codes of practice; – 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: o whether these measures are consistent with industry best practice, and represent the full range of reasonable and feasible mitigation measures that could be implemented; o the likely effectiveness of these measures; and o 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 *State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007);* • the reasons why the development should be approved, having regard to: – relevant matters for consideration under the *Environmental Planning and Assessment Act 1979*, including the objects of the Act; – the biophysical, economic and social impacts of the project, 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. 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. In addition to the matters set out in Schedule 1 of the *Environmental Planning and Assessment Regulation 2000*, the development application must be accompanied by 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 *Environmental Planning and Assessment Regulation 2000*), including details of all the assumptions and components from which the capital investment value calculation is derived.
Key Issues	The EIS must address the following key issues: • **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 any 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 agricultural land uses in the region; • **Air Quality** – including: - a detailed assessment of potential construction and operational air quality impacts, in accordance with the *Approved Methods for the Modelling and Assessment of Air Pollutants in NSW 2016,* and with a particular focus on particulate matter emissions ($PM_{2.5}$ and PM_{10})

emissions, and having regard to the *Voluntary Land Acquisition and Mitigation Policy 2018*; and
- an assessment of the likely greenhouse gas emissions of the development;

- **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;
  - a description of how any outstanding rehabilitation obligations for the existing Mangoola Mine would be satisfied or altered by the development;
  - an analysis of final landform and post-mining land use options for the site, including the short and long-term cost and benefits, constraints and opportunities of each, and detailed justification for the preferred option;
  - 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:
    - rehabilitation objectives, methodology, monitoring programs, performance standards and proposed completion criteria;
    - decommissioning and management of surface infrastructure;
    - nominated final land uses, having regard to any relevant strategic land use planning or resource management plans or policies; and
    - potential for integrating the rehabilitation strategy with any other offset strategies in the region; 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;
- **Noise & Blasting** – including:
  - a detailed assessment of the likely construction, operational and off-site transport noise impacts of the development in accordance with the *Interim Construction Noise Guideline*, *NSW Noise Policy for Industry* and the *NSW Road Noise Policy* respectively, and having regard to the *Voluntary Land Acquisition and Mitigation Policy 2018*;
  - an assessment of the likely rail noise impacts of the development under the *Rail Infrastructure Noise Guideline*;
  - proposed blasting hours, frequency and methods; and
  - a detailed assessment of the likely blasting impacts of the development (including ground vibration, overpressure, visual and odour) on people, animals, buildings, infrastructure and significant natural features, having regard to the relevant ANZEC guidelines;
- **Visual** – including a detailed assessment of the likely visual impacts of the development on private landowners in the vicinity of the development and key vantage points in the public domain, paying particular attention to any new landforms, and to minimising the lighting impacts of the development;
- **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;
- **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; – an assessment of the likely impacts of the development on aquifers, watercourses, riparian land, water-related infrastructure, and other water users; and – an assessment of the likely impacts of the development on a water resource, in relation to coal seam gas development and large coal mining development under the *Environment Protection and Biodiversity Conservation Act 1999* (see Attachment 3); • **Biodiversity** – including**:** - an assessment of the likely biodiversity impacts of the development, paying particular attention to threatened species, populations and ecological communities and groundwater dependent ecosystems, and having regard to the *Framework for Biodiversity Assessment* and Biobanking Assessment Methodology; - assessment of the likely impacts of the development on listed threatened species and communities under the *Environment Protection and Biodiversity Conservation Act 1999* (see Attachment 3); and - a strategy to offset any residual impacts of the development in accordance with the *NSW Biodiversity Offsets Policy for Major Projects* or the Biodiversity Offsets Scheme under the *Biodiversity Conservation Act 2016* (as relevant for Commonwealth matters); • **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; and - a description of the measures that would be implemented to mitigate any impacts, including concept plans of the proposed overpasses and road realignment, developed in consultation with the relevant road authorities; • **Hazards** – including an assessment of the likely risks to public safety, paying particular attention to potential bushfire risks, blasting impacts and the handling and use of any dangerous goods; and • **Social** – including a detailed assessment of the likely social impacts of the development on the local and regional community in accordance with the *Social impact assessment guideline for State significant mining, petroleum production and extractive industry development 2017*; and • **Economic** – including a detailed assessment of the likely economic impacts of the development, in accordance with the *Guidelines for the economic assessment of mining and coal seam gas proposals 2015,* paying particular attention to: - 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 for the provision of local infrastructure and services.
Consultation	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. In particular you must: • consult with: - affected landowners; - local community groups; - Muswellbrook Shire Council; - Office of Environment and Heritage (including the Heritage Branch); - Environment Protection Authority; - Division of Resources and Geoscience within the Department; - NSW Resources Regulator; - Department of Primary Industries (including NSW Forestry, Agriculture and Fisheries); - Department of Industry (including the Lands and Water Division); - Roads and Maritime Services; - NSW Rural Fire Service; - NSW Health; - NSW Dams Safety Committee, - Hunter Local Land Services; - Australian Rail Track Corporation and the Hunter Coal Chain Coordinator; and - any affected electricity distribution authority; and • operate a Community Consultative Committee for the project (or utilise the existing Mangoola Community Consultative Committee) in accordance with the *Community Consultative Committee Guidelines for State Significant Projects and* consult with the committee during the preparation of the EIS. The EIS must: • describe the consultation process used and demonstrate that effective consultation has occurred; • describe the issues raised by public authorities, service providers, community groups and landowners; • identify where the design of the development has been amended in response to issues raised; and • otherwise demonstrate that issues raised have been appropriately addressed in the assessment.
Further consultation after 2 years	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 Secretary in relation to the preparation of the EIS.

ATTACHMENT 1

Environmental Planning Instruments, Policies, Guidelines & Plans

Land	
	Interim Protocol for Site Verification and Mapping of Biophysical Strategic Land 2013 (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)
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)
	Hunter Bioregional Assessment 2018 (Commonwealth)
	Information guidelines for proponents preparing coal seam gas and large coal mining development proposals (IESC)
	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	
	Framework for Biodiversity Assessment (OEH)
	NSW Biodiversity Offset Policy for Major Projects (OEH)

	Guidelines for Threatened Species Assessment (DP&E)
	NSW State Groundwater Dependent Ecosystem Policy (NOW)
	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 2010 (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 2011 (OEH)
	NSW Heritage Manual 1996 (OEH)
	Statements of Heritage Impact (OEH)
	Assessing Significance for Historical Archaeological Sites and Relics 2009 (OEH)
	Muswellbrook Local Environment Plan 2009
	Hunter Regional Environmental Plan 1989 (Heritage)
Noise & Blasting	
	NSW Noise Policy for Industry 2017 (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 2018 (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 for the Modelling and Assessment of Air Pollutants in NSW 2016 (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)
	National Greenhouse Accounts Factors (Commonwealth)
	Voluntary 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
	Muswellbrook Mine Affected Roads – Network Plan
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)
	Synoptic Plan: Integrated landscapes for coal mine rehabilitation in the Hunter Valley 1999 (DMR)
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

Department of Primary Industries

OUT17/31113

Mr Anthony Barnes
Resource Assessments
NSW Department of Planning and Environment
GPO Box 39
SYDNEY NSW 2001

anthony.barnes@planning.nsw.gov.au

Dear Mr Barnes

Mangoola Coal Continued Operations (SSD 8642)
Request for SEARs

I refer to your email of 28 July 2017 to the Department of Primary Industries (DPI) in respect to the above matter. Comment has been sought from relevant branches of DPI. Views were also sought from NSW Department of Industry - Lands that are now a division of the broader Department and no longer within NSW DPI.

Any further referrals to DPI can be sent by email to landuse.enquiries@dpi.nsw.gov.au.

In addition to the assessment outlined in the Preliminary Environmental Assessment, DPI recommends the Environmental Impact Statement for the proposal address the following:

Agricultural Resources

- Specific guidance on satisfying the requirements for the Agricultural Impact Statement should be taken from the Department of Primary Industries, Agricultural Impact Statement Technical Notes available at: http://www.dpi.nsw.gov.au/agriculture/resources/lup/development-assessment

Crown Land

- Crown Land and Crown Roads within the mining lease must be subject to a Compensation Agreement to be agreed and executed prior to any mining activity taking place and within 12 months of Project Approval. The Compensation Agreement may require purchase of Crown Land impacted on by mining activity. If necessary the applicant should deal with Native Title via Non-Claimant Application and any ALC Claims via Deed of Agreement.

Water Resources

- Outline how proposed development will address the following legislation, policies and guidelines:
    - NSW Groundwater Quality Protection Policy

      http://www.water.nsw.gov.au/__data/assets/pdf_file/0006/548286/nsw_state_groundwater_quality_policy.pdf
    - NSW State Groundwater Dependent Ecosystems Policy

http://www.water.nsw.gov.au/__data/assets/pdf_file/0005/547844/groundwater_dependent_ecosystem_policy_300402.pdf

- Guidelines for Controlled Activities

  http://www.water.nsw.gov.au/water-licensing/approvals/controlled-activity

- The relevant provisions of the Water Sharing Plan for the Hunter Unregulated and Alluvial Water Sources 2009

  https://www.legislation.nsw.gov.au/#/view/regulation/2009/347

- The relevant provisions of the Water Sharing Plan for the North Coast Fractured and Porous Rock Groundwater Sources 2016

  https://www.legislation.nsw.gov.au/#/view/regulation/2016/375

Yours sincerely

Mitchell Isaacs
Director, Planning Policy & Assessment Advice
14 August 2017

DPI appreciates your help to improve our advice to you. Please complete this three minute survey about the advice we have provided to you, here:
https://goo.gl/o8TXWz

Planning & Environment
Resources & Geoscience

OUT17/33342

Anthony Barnes
Senior planning Officer
Resource Assessments - Planning Services Division
Department of Planning & Environment
GPO Box 39
SYDNEY NSW 2001

Anthony.Barnes@planning.nsw.gov.au

Dear Anthony

Mangoola Coal Mine - SEARs Request

I refer to your email dated 11 August 2017 inviting the Division of Resources & Geoscience (the Division) to provide comments on the Mangoola Coal Mine - SEARs Request (the Project) submitted by Mangoola Coal Operations Pty Ltd (the Proponent).

The Division has reviewed the adequacy of information supplied relation to the abovementioned Project and provides the following advice:

The Division recommends that the standard mining development rehabilitation SEARs be applied to this project. However, Should biodiversity offsets be considered for the project, the Division requests the proponent consult with the Division to ensure there are no potential sterilisation impacts to resources.

Should you have any enquires regarding this matter please contact:
Adam Banister, Acting Senior Advisory Officer - Royalties & Advisory Services on (02) 4931 6439.

Yours sincerely

Matthew Gagan
Acting Manager Royalties & Advisory Services
14 August 2017

DOC17/394258-01; EF13/4404 (SSD 17_8642)

Department of Planning and Environment
GPO Box 39
SYDNEY NSW 2001

Attention: Anthony Barnes
By email: anthony.barnes@planning.nsw.gov.au

MANGOOLA COAL CONTINUED OPERATIONS PROPOSAL (SSD 17_8642)
SECRETARY'S ENVIRONMENTAL ASSESSMENT REQUIREMENTS

I refer to your email to the Environment Protection Authority (EPA), dated 28 July 2017, seeking the EPA's recommended Secretary Environmental Assessment Requirements (SEARS) for the Mangoola Coal Continued Operations Proposal, SSD 17_8642. Provided with your email is the report titled '*Magoola Coal Continued Operations Project – Preliminary Environmental Assessment*', dated July 2017 and prepared by Umwelt (Australia) Pty Limited.

The EPA has considered the proposal and has identified in **Attachment A** the information it requires to assess the project. In summary, the EPA's key information requirements for the project include an adequate description and assessment of:

1. Project proposal including size of the operation, proposed processes, operational hours, maximum and average annual production rate, staging and timing of the proposal;
2. Air quality impacts including a description of all emissions and a specific description of proposed air pollution management strategies;
3. Noise and vibration impacts associated with the proposed construction and hours of operation.
4. Water management onsite including process and stormwater management, sedimentation ponds, details and justification for any proposed discharge(s) and the sensitivity of the receiving environment.
5. Waste generation, source location, classification, quantities, reuse and management measures for activities undertaken at the premises;
6. A proposed monitoring plan to assess the impact on the environment and surrounding receivers over time;
7. An assessment of the cumulative impacts associated with this proposal and other activities in the local area; and
8. Actions that will be taken to avoid or mitigate impacts or compensate for any unavoidable impacts associated with proposed operations.

In carrying out the assessment, the proponent should refer to the relevant guidelines listed in **Attachment B** and any relevant industry codes of practice and best practice management guidelines.

PO Box 488G Newcastle NSW 2300
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Tel: (02) 4908 6800 Fax: (02) 4908 6810
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www.epa.nsw.gov.au

The proponent should also be aware that any commitments made in the EIS may be formalised as approval conditions and subsequently environment protection licence conditions. Pollution control measures should not be proposed if they are impractical, unrealistic or beyond the financial viability of the development. It is important that all conclusions are supported by adequate data.

If you require any further information regarding this matter, please contact me on 4908 6819 or by email to hunter.region@epa.nsw.gov.au.

Yours sincerely

MICHAEL HOWAT
Regional Operations Officer - Hunter
Environment Protection Authority

Encl: **Attachment A** – EPA's Recommended Secretary's Environmental Assessment Requirements – Mangoola Coal Continued Operations Project (SSD 17_8642)

Attachment B – Guidance Material

ATTACHMENT A

EPA's Recommended Secretary's Environmental Assessment Requirements – Mangoola Coal Continued Operations Project (SSD 17_8642)

1 Environmental impacts of the project

Impacts related to the following environmental issues need to be assessed, quantified and reported on:

- Air Quality
- Noise and Vibration
- Water and Soil Quality and Management
- Waste Management
- Dangerous Goods, Chemical Storage and Bunding

The Environmental Impact Statement (EIS) should address the specific requirements outlined under each heading below and assess impacts in accordance with the relevant guidelines mentioned. A full list of guidelines is at Attachment B.

2 Licensing requirements

Should project approval be granted, the proponent will need to make a separate application to EPA for a variation to the existing Environment Protection Licence No. 12894 for the Mangoola Coal Mine. Additional information is available through EPA's *Guide to Licensing* document.

General information on licence requirements can also be obtained from EPA's Environment Line on 131 555 during office hours, or can be found at the EPA web site at:
http://www.epa.nsw.gov.au/licensing/

3 The Proposal and Premises

The objectives of the proposal should be clearly stated and refer to:

- The size and type of the operation;
- The nature of the processes and the products, by-products and wastes produced;
- The types and quantities of any chemicals to be used and stored onsite;
- Proposed operational hours, including any heavy vehicle movements;
- Proposed maximum and average annual production rates that will occur at the premises; and
- Proposed staging and timing of the proposal.

The EIS will need to fully identify all the processes and activities intended for the site over the life of the development. This will include details of:

- The location of the proposed facility and details of the surrounding environment;
- The proposed layout of the site;
- Appropriate land use zoning;
- Ownership details of any residence and/or land likely to be affected by the proposed operations;
- Maps/diagrams showing the location of residences and properties likely to be affected and other industrial developments, conservation areas, wetlands, etc. in the locality that may be affected by the facility;
- All equipment proposed for use at the site;
- All chemicals, including fuel, used on the site and proposed methods for their transportation, storage, use and emergency management;
- Clearly detail the boundary of the premises; and
- Methods to mitigate any expected environmental impacts of the development.

4 Air Issues

4.1 Air quality

The EIS should include an air quality impact assessment (AQIA) in accordance with the Approved Methods for the Modelling and Assessment of Air Pollutants in NSW, including, as a minimum the following components:

Assessment Objective

1. Demonstrate the proposed project will incorporate and apply best management practice emission controls; and
2. Demonstrate that the project will not cause violation of the project adopted air quality impact assessment criteria at any residential dwelling or other sensitive receptor.

Assessment Criteria

- Define applicable assessment criteria for the proposed development referencing the Approved Methods for the Modelling and Assessment of Air Pollutants in NSW, including appendices and updates
- Demonstrate the proposal's ability to comply with the relevant regulatory framework, specifically the *Protection of the Environment Operations* (POEO) *Act* (1997) and the POEO (Clean Air) Regulation (2010).

Existing Environment

- Provide a detailed description of the existing environment within the assessment domain, including:
    - geophysical form and land-uses;
    - location of all sensitive receptors;
    - existing air quality; and
    - local and regional prevailing meteorology.
- Justify all data used in the assessment, specifically including analysis of inter-annual trends (preferably five consecutive years of data), availability of monitoring data, and local topographical features.
- Meteorological modelling must be verified against monitored data. Verification should involve comparative analysis of wind speed, wind direction and temperature, at a minimum.
- A review of all existing, recently approved and planned developments likely to contribute to cumulative air quality impacts must be completed.

Emissions Inventory

- Provide a detailed description of the project and identify the key stages with regards to the potential for air emissions and impacts on the surrounding environment.
- Identify all sources of air emissions, including mechanically generated, combustion and transport related emissions likely to be associated with the proposed development.
- Estimate emissions of TSP, PM10, PM2.5, NOx, (tonnes per year), at a minimum, for all identified sources during each key development stage. The emissions inventory should:
    - utilise USEPA (1995) (and updates) emission estimation techniques, direct measurement or other method approved in writing by EPA;
    - calculate uncontrolled emissions (with no particulate matter controls in place); and
    - calculate controlled emissions (with proposed particulate matter controls in place).

- The emissions inventory must be explicitly coupled with the project description.
- Provide a detailed summary and justification of all parameters adopted within all emission estimation calculations, including site specific measurements, proponent recommended values or published literature.
- Document, including quantification and justification, all air quality emission control techniques/practices proposed for implementation during the project. As a minimum, consideration must be given to source control techniques, emission control through mine planning and reactive/predictive management techniques.
- Blasting emission estimation should provide specific details on likely activities, including the frequency of blasts, area per blast, amount and type of explosives used and blasting hours.

Best Practice Determination

- Based on the TSP, PM10 and PM2.5 emissions inventories calculated for the proposed development, undertake a site-specific best practice determination, in accordance with the document Coal Mine Particulate Matter Control Best Practice – Site specific determination guideline.
- Demonstrate that the proposed control techniques/practices are consistent with best management practice.

Dispersion Modelling and Interpretation of Results

- Atmospheric dispersion modelling should be undertaken in accordance with the Approved Methods for the Modelling and Assessment of Air Pollutants in NSW, including appendices and updates.
- Modelling must implement fit for purpose modelling techniques that:
    - have regard for the most up to date and scientifically accepted dispersion modelling techniques;
    - contextualise all assumptions based on current scientific understanding and available data; and
    - include a thorough validation of adopted methods and model performance.
- Use an appropriate atmospheric dispersion model to predict, at a minimum, incremental ground level concentrations/levels of the following:
    - 24-hour and annual average PM10 concentrations;
    - 24-hour and annual average PM2.5 concentrations; and
    - 1-hour and annual average NO2 concentrations. NO2 concentrations should be assessed using a well justified approach for the transformation of NOx to NO2.
- Ground level concentrations of pollutants should be presented for surrounding privately-owned properties, mine-owned properties and other sensitive receptors (as applicable).
- Undertake a cumulative assessment of predicted impacts. The contribution of all identified existing and recently approved developments should be accounted for in the cumulative assessment.
- Cumulative 24-hour PM10 and PM2.5 concentrations must be assessed in accordance with the Approved Methods for the Modelling and Assessment of Air Pollutants in NSW, including appendices and updates, and/or a suitably justified probabilistic methodology.
- Cumulative annual average PM10, PM2.5, and NO2 should be assessed using a sufficiently justified background concentration(s);
- Results of dispersion modelling should be presented as follows:

- isopleth plots showing the geographic extent of maximum pollutant concentrations (incremental and cumulative);
- tables presenting the maximum predicted pollutant concentrations (increment and cumulative) and the frequency of any predicted exceedances at each surrounding privately-owned properties, mine-owned properties and other sensitive receptors (as applicable); and
- time series and frequency distribution plots of pollutant concentrations at each private receptor location at which an exceedance is predicted to occur. Where no exceedances are predicted, the analysis must be performed for the most impacted off site sensitive receptor.

Air Quality Emission Control Measures

- Provide a detailed discussion of all proposed air quality emission control measures, including details of a reactive/predictive management system. The information provided must include:
  - explicit linkage of proposed emission controls to the site specific best practice determination assessment
  - timeframe for implementation of all identified emission controls;
  - key performance indicators for emission controls;
  - monitoring methods (location, frequency, duration);
  - response mechanisms;
  - responsibilities for demonstrating and reporting achievement of KPIs;
  - record keeping and complaints response register; and
  - compliance reporting.

5 Noise and Vibration

The following matters should be addressed in relation to noise and vibration impacts associated with the proposal. This includes identification of the hours of operations, assessment of all activities where proposed, and impacts on sensitive receivers associated with the proposed hours of operation. The following matters should be addressed as part of the EIS.

General

- Construction noise associated with the proposed development should be assessed using the Interim Construction Noise Guideline (DECC, 2009).
- Vibration from all activities (including construction and operation) to be undertaken on the premises should be assessed using the guidelines contained in the Assessing Vibration: a technical guideline (DEC, 2006).
- Blast impacts should be demonstrated to be capable of complying with the guidelines contained in Australian and New Zealand Environment Council – Technical basis for guidelines to minimise annoyance due to blasting overpressure and ground vibration (ANZEC, 1990).

Industry

- Operational noise from all industrial activities (including private haul roads) to be undertaken on the premises should be assessed using the guidelines contained in the NSW Industrial Noise Policy (EPA, 2000) and Industrial Noise Policy Application Notes.

Road

- Noise on public roads from increased road traffic generated by land use developments should be assessed using the guidelines contained in the NSW Road Noise Policy (DECCW, 2011).

- Noise from new or upgraded public roads should be assessed using the NSW Road Noise Policy (DECCW, 2011).

Monitoring

- Detail monitoring that will be conducted to assess the impacts of the proposal.

6 Water and Soils

6.1 Water Quality

Describe Proposal

- Describe the proposal including position of any intakes and discharges, volumes, water quality and frequency of all water discharges.

- Demonstrate that all practical options to avoid discharges have been implemented and environmental impact minimised where discharge is necessary.

- Where relevant include a water balance for the development including water requirements (quantity, quality and source(s)) and proposed storm and wastewater disposal, including type, volumes, proposed treatment and management methods and re-use options.

Background Conditions

- Describe existing surface and groundwater quality. An assessment needs to be undertaken for any water resource likely to be affected by the proposal. Issues to be discussed should include but are not limited to:
  - a description of any impacts from existing industry or activities on water quality
  - a description of the condition of the local catchment e.g. erosion, soils, vegetation cover, etc.
  - an outline of baseline groundwater information, including, for example, depth to water table, flow direction and gradient, groundwater quality, reliance on groundwater by surrounding users and by the environment
  - historic river flow data

- State the Water Quality Objectives for the receiving waters relevant to the proposal. These refer to the community's agreed environmental values and human uses endorsed by the NSW Government as goals for ambient waters (http://www.environment.nsw.gov.au/ieo/index.htm). Where groundwater may be impacted the assessment should identify appropriate groundwater environmental values.

- State the indicators and associated trigger values or criteria for the identified environmental values. This information should be based on the ANZECC (2000) Guidelines for Fresh and Marine Water Quality as a minimum but should also be based on advice from Hunter Water Corporation given the sensitive receiving environment of Grahamstown Dam water supply.

- State any locally specific objectives, criteria or targets which have been endorsed by the NSW Government.

Impact Assessment

- Describe the nature and degree of impact that any proposed discharges will have on the receiving environment, both surface water and groundwater.
- Detail contractual and other arrangements that will be put in place to prevent pollution from haul roads and unsealed roads per se, particularly rights of carriageways not owned by the proponent.
- Assess impacts against the relevant ambient water quality outcomes. Demonstrate how the proposal will be designed and operated to:
  - protect the Water Quality Objectives for receiving waters where they are currently being achieved; and
  - contribute towards achievement of the Water Quality Objectives over time where they are not currently being achieved.
- Where a discharge is proposed that includes a mixing zone, the proposal should demonstrate how wastewater discharged to waterways will ensure the ANZECC (2000) water quality criteria for relevant chemical and non-chemical parameters are met at the edge of the initial mixing zone of the discharge, and that any impacts in the initial mixing zone are demonstrated to be reversible.
- Propose water quality limits for any discharge(s) that adequately protects the receiving environment.
- Assess impacts on groundwater and groundwater dependent ecosystems.
- Describe how stormwater will be managed both during and after construction.

Monitoring

- Describe how predicted impacts will be monitored and assessed over time.

6.2 Soil

The EIS should include:

- An assessment of potential impacts on soil and land resources should be undertaken, being guided by Soil and Landscape Issues in Environmental Impact Assessment (DLWC 2000). The nature and extent of any significant impacts should be identified. Particular attention should be given to:
  - Soil erosion and sediment transport - in accordance with Managing urban stormwater: soils and construction, vol. 1 (Landcom 2004) and vol. 2 (A. Installation of services; B Waste landfills; C. Unsealed roads; D. Main Roads; E. Mines and quarries) (DECC 2008).
  - Mass movement (landslides) – in accordance with Landslide risk management guidelines presented in Australian Geomechanics Society (2007).
  - Urban and regional salinity – guidance given in the Local Government Salinity Initiative booklets which includes Site Investigations for Urban Salinity (DLWC, 2002).

- A description of the mitigation and management options that will be used to prevent, control, abate or minimise identified soil and land resource impacts associated with the project. This should include an assessment of the effectiveness and reliability of the measures and any residual impacts after these measures are implemented.

7 Waste

The EIS should:

- Include a detailed plan for in-situ classification of waste material, including the sampling locations and sampling regime that will be employed to classify the waste, particularly with regards to the identification of contamination hotspots.

- Identify, quantify, characterise and classify all waste that currently exists at the site. Identify the intended end use, for example reuse or disposal, and the end use location(s) for the waste. Also, specify the mechanism under which waste will be reused or disposed, such as a Resource Recovery Exemption. Note: All waste must be classified in accordance with EPA's Classification Guidelines.

- Identify, characterise and classify all waste that will be generated onsite through excavation, demolition or construction activities, including proposed quantities of the waste.
  Note: All waste must be classified in accordance with EPA's Waste Classification Guidelines.

- Identify, characterise and classify all waste that is proposed to be disposed of to an offsite location, including proposed quantities of the waste and the disposal locations for the waste. This includes waste that is intended for re-use or recycling.
  Note: All waste must be classified in accordance with EPA's Classification Guidelines.

- Include a commitment to retaining all sampling and classification results for the life of the project to demonstrate compliance with EPA's Waste Classification Guidelines.

- Provide details of how waste will be handled and managed onsite to minimise pollution, including:

  a) Stockpile location and management
     - Labelling of stockpiles for identification, ensuring that all waste is clearly identified and stockpiled separately from other types of material (especially the separation of any contaminated and non-contaminated waste).
     - Proposed height limits for all waste to reduce the potential for dust and odour.
     - Procedures for minimising the movement of waste around the site and double handling.
     - Measures to minimise leaching from stockpiles into the surrounding environment, such as sediment fencing, geofabric liners etc.

  b) Erosion, sediment and leachate control including measures to be implemented to minimise erosion, leachate and sediment mobilisation at the site during works. The EIS should show the location of each measure to be implemented. The Proponent should consider measures such as:
     - Sediment traps
     - Diversion banks
     - Sediment fences
     - Bunds (earth, hay, mulch)
     - Geofabric liners
     - Other control measures as appropriate

     The Proponent should also provide details of:
     - how leachate from stockpiled waste material will be kept separate from stormwater runoff;
     - treatment of leachate through a wastewater treatment plant (if applicable); and
     - any proposed transport and disposal of leachate off-site.

- Provide details of how the waste will be handled and managed during transport to a lawful facility. If the waste possesses hazardous characteristics, the Proponent must provide details of how the waste will be treated or immobilised to render it suitable for transport and disposal.

- Include details of all procedures and protocols to be implemented to ensure that any waste leaving the site is transported and disposed of lawfully and does not pose a risk to human health or the environment.

- Include a statement demonstrating that the Proponent is aware of EPA's requirements with respect to notification and tracking of waste.

- Include a statement demonstrating that the Proponent is aware of the relevant legislative requirements for disposal of the waste, including any relevant Resource Recovery Exemptions, as gazetted by EPA from time to time.

- Outline contingency plans for any event that affects operations at the site that may result in environmental harm, including: excessive stockpiling of waste, volume of leachate generated exceeds the storage capacity available on-site etc.

8 Dangerous Goods, Chemical storage and Bunding

- The EIS must outline all details regarding the transport, handling, storage and use of dangerous goods, chemicals and products, including fuel, both on site and with ancillary activities and describe the measures proposed to minimise the potential for leakage or the migration of pollutants into the soil/waters or from the site.

- The EIS should identify any fuel or chemical storage areas proposed for the site.

- The EIS should consider compliance with the following legislation, standards and guidelines where relevant:
  - Australian Standard AS1692:1989 Tanks for Flammable and combustible liquids;
  - The DECC's "Bunding and Spill Management" Technical Guideline (November 1997)
  - Australian Standard AS 1940:2004 The Storage and Handling of Flammable and Combustible Liquids
  - Australia Standard AS 4452-1997: The Storage and Handling of Toxic Substances;
  - Australian/New Zealand Standard AS/NZS 4452:1997: The Storage and Handling of Mixed Classes of Dangerous Goods in Packages and Intermediate Bulk Containers; and
  - Road and Rail Transport (Dangerous Goods) Act 1997

9 Monitoring Programs

The EIS should include a detailed assessment of any noise, air quality, weather, water or waste monitoring required during the construction and on-going operation of the site to ensure that the development achieves a satisfactory level of environmental performance. The evaluation should include a detailed description of the monitoring locations, sample analysis methods and the level of reporting proposed.

ATTACHMENT B

Guidance Material

Title	Web address
Relevant Legislation	
Environmentally Hazardous Chemicals Act 1985	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+14+1985+cd+0+N
Environmental Planning and Assessment Act 1979	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+203+1979+cd+0+N
Protection of the Environment Operations Act 1997	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+156+1997+cd+0+N
Water Management Act 2000	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+92+2000+cd+0+N
Licensing	
Guide to Licensing	www.environment.nsw.gov.au/licensing/licenceguide.htm
Air Issues	
Air Quality	
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 (2016)	http://www.epa.nsw.gov.au/resources/air/07001amsaap.pdf
Coal Mine Particulate Matter Control Best Practice – Site specific determination guide	www.epa.nsw.gov.au/resources/air/20110813coalmineparticulate.pdf
POEO (Clean Air) Regulation 2010	http://www.legislation.nsw.gov.au/maintop/view/inforce/subordleg+428+2010+cd+0+N
Noise and Vibration	
Interim Construction Noise Guideline (DECC, 2009)	http://www.environment.nsw.gov.au/noise/constructnoise.htm
Assessing Vibration: a technical guideline (DEC, 2006)	http://www.environment.nsw.gov.au/noise/vibrationguide.htm
Australian and New Zealand Environment Council – Technical basis for guidelines to minimise annoyance due to blasting overpressure and ground vibration (ANZEC, 1990)	http://www.environment.nsw.gov.au/noise/blasting.htm
NSW Industrial Noise Policy	http://www.epa.nsw.gov.au/resources/noise/ind_noise.pdf
NSW Road Noise Policy (DECCW, 2011)	http://www.epa.nsw.gov.au/resources/noise/2011236nswroadnoisepolicy.pdf
Waste	
Waste Classification Guidelines (EPA, 2014)	http://www.epa.nsw.gov.au/wasteregulation/classify-guidelines.htm
Resource recovery exemption	http://www.epa.nsw.gov.au/wasteregulation/recovery-exemptions.htm

Title	Web address
Water and Soils	
Soils – general	
Soil and Landscape Issues in Environmental Impact Assessment (DLWC 2000)	http://www.dnr.nsw.gov.au/care/soil/soil_pubs/pdfs/tech_rep_34_new.pdf
Managing urban stormwater: soils and construction, vol. 1 (Landcom 2004) and vol. 2 (A. Installation of services; B Waste landfills; C. Unsealed roads; D. Main Roads; E. Mines and quarries) (DECC 2008)	Vol 1 - Available for purchase at http://www.landcom.com.au/whats-new/publications-reports/the-blue-book.aspx Vol 2 - http://www.environment.nsw.gov.au/stormwater/publications.htm
Landslide risk management guidelines	http://www.australiangeomechanics.org/resources/downloads/
Site Investigations for Urban Salinity (DLWC, 2002)	http://www.environment.nsw.gov.au/resources/salinity/booklet3siteinvestigationsforurbansalinity.pdf
Local Government Salinity Initiative Booklets	http://www.environment.nsw.gov.au/salinity/solutions/urban.htm
Water	
Water Quality Objectives	http://www.environment.nsw.gov.au/ieo/index.htm
ANZECC (2000) Guidelines for Fresh and Marine Water Quality	http://www.mincos.gov.au/publications/australian_and_new_zealand_guidelines_for_fresh_and_marine_water_quality
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

muswellbrook shire council

Enquiries
Please ask for Steve McDonald
Direct 02 6549 3700
Our reference
Your reference

16 August 2017

Mr Anthony Barnes
Senior Planning Officer, Resource Assessments
Dept of Planning & Environment
GPO Box 39
SYDNEY NSW 2001

Dear Anthony,

RE: Mangoola Coal Continued Operations SEARs Request (SSD 17_8642)

Council makes the following submission with respect to the Secretary's Environmental Assessment Requirements (SEARs) for the compilation of the environmental assessment (the **Assessment**) for the Mangoola Coal Continued Operations Project (the **Project**):

Planning instruments

1. The Assessment should address the requirements of:

   (a) Council's Land Use Development Strategy (Coal Mining Component); and

   (b) The Muswellbrook Local Environmental Plan including the Draft Discussion Paper on the Muswellbrook Local Environmental Plan Review;

Mine Plan

2. The Assessment should provide a:

   (a) table setting out proposed yearly coal extraction amounts (ROM) for each year of the Project;

   (b) construction timetable; and

   (c) post-mining rehabilitation including:

      (i) Progressive rehabilitation maps showing micro-relief with sufficient detail including topographical lines to enable the community to understand what the final landform will look like;

      (ii) Expected mining and rehabilitation progression maps for each year of the project;

Traffic

3. A traffic assessment should be undertaken which assesses any changes compared to the existing development to:

   (a) the impact of the Continuation Project on roads and intersections in Muswellbrook Shire including (without limitation);

      (i) Wybong Road (incorporating proposed diversions),
      (ii) Bengalla Link Road,
      (iii) Thomas Mitchell Drive, and
      (iv) The State road network,

   Note: Traffic assessments should be undertaken with a high level of fidelity as Council is likely to seek conditions which bind the Project traffic to its predictions.

   (b) any impact on emergency access and the use of roads in emergency situations; and

   (c) contemplates the management of oversize vehicles.

   The traffic assessment should:

   (a) consider the impact on Council's road network with reference to the principles set out in RMS's "Network Planning Practice Notes;"

   (b) assess travel distances and times for all major users and routes, including changes resulting from the realignment of Post Office Road, and;

   (c) include estimates of vehicle mass and equivalent standard axles (ESA) as well as volume for all road traffic assessment so that pavement life and maintenance impacts can be determined, for any additional traffic predicted to result from either the construction or operation of the Continuation Project.

   Where any Council local road (Post Office Road) is sought to be closed (including any realignment of a road outside its reserve), the assessment should include an alternative mine plan and final landform plan in the event that Council does not resolve to close that road in accordance with the *Roads Act* 1993.

Road Infrastructure

4. The assessment must assess the impact on and, where appropriate, review and make recommendations concerning Council's Mine Affected Roads Network Plan (in consultation with the broader mining industry).

   Details of the haul road(s) crossing the Wybong road are to be included in the assessment showing proposed height, width, length and service life and details the Proponent commits to provide with a Section138 Application under the Roads Act, should the Continuation application be approved.

Air Quality

5. Assessment of existing and predicted post continuation operational maximum and minimum $PM_{2.5}$, and PM_{10} particulate generation must be made for all particulate matter:

   (a) Leaving the proposed disturbance approval;

   (b) Leaving the Mining lease;

   (c) Affecting a township or village; and

   (d) Affecting any landholder, leasee, or licensee impacted upon by the Project.

   for both daytime and night time hours.

   Note: Air quality assessments should be undertaken with a high level of fidelity as Council is likely to seek conditions which bind the Project to its predictions.

Workforce

6. An assessment of the Project's labour force requirements must be made which identifies or predicts:

   (a) The projected construction workforce and composition by local government area for the construction phase of the Project;

   (b) Any change in the total direct operational workforce and composition by local government area resulting from the Project and;

   (c) The total number of apprentices and trainees required to manage workforce replacement over the life the Project;

Social infrastructure and services

7. Assessment of social infrastructure and services should explicitly include any changes predicted to:

   (a) Health Services; medical, dental and hospital;

   (b) Emergency Services: ambulance, fire and rescue, Rural Fire Service, State Emergency Service;

(c) Secondary, vocational and higher education;

(d) Child care; and

(e) Recreation.

(f) Revised zones of Mitigation and Acquisition predicted from changes to the location of mining resulting from the Project.

Accommodation

8. Housing affordability and accommodation demand should be addressed for all stages of the project. Assessment should be based on current housing stock and the capacity of rental and existing or approved motel and hotel accommodation to satisfy accommodation demands throughout, but particularly in the early construction stages of the project.

Rehabilitation and final landform

9. The assessment should include a landform model for each year of the project which:

(a) depicts impacted landform geomorphology to a 1:25,000 scale;

(b) contains detail for all anthropogenic landform changes at a scale of 1:5,000 where the final landforms avoid planar slope and include areas of flow convergence that reflect the pre-disturbance geomorphology of the region and best practice mine rehabilitation drainage design;

(c) provides a range of cross-sections;

(d) provides a range of visual montages at significant locations including adjoining property holdings, public roads, and other public vantage points. This should include a number of stages of the development of the Project, and particularly the void planned for the end of the Project.

Biodiversity Offsets

10. The assessment should include a prediction of any addition areas of land that will need to be set aside as Biodiversity Offsets. This should include the following:

(a) The area and location(s) of the additional offset land;

(b) The vegetation communities to be targeted in the offset areas;

(c) Methods, if any, to be used to provide long term security of the offset areas;

(d) A description of how this land will not be sterilised for any future purpose, should viable sustainable land use options for the land be sought in the future.

Ongoing Consultation

11. The Assessment should include details as to ongoing community, key stakeholder, and Council consultation in the operation of the project and the development and amendment of documents proposed for compilation under the Assessment.

Closure Planning

12. The Assessment should include options for the long term use of the land post mining and details as to how rehabilitation will contemplate and enhance those long term uses.

Other matters

It is noted there is no specific commitment to use, as far as possible, overburden from the proposed extension to fill the approved mine void in the south of the existing development. There is instead a vague commitment to use a haul road for the distribution of overburden between the Additional Mining Area and the existing mine. It is further noted that the bridge over the Big Flat Creek and Wybong Road appears to be located to simplify the removal of coal to the existing CHPP areas, and will not take overburden where it can be beneficially placed in the existing mine. With the addition of a second Wybong Road crossing, much of the planned new pit is closer to the existing approved void than to the proposed out of pit overburden emplacement, making emplacement into the existing void practical.

The location of the out of pit emplacement shown in Fig 6.3 has operations closer to non-mined owned residents in Castlerock road than ever has occurred with the existing operation. This could result in additional noise and dust impacts on the residents of Castlerock Road. To avoid this, all efforts should be explored in the EA for material to be preferentially placed in the existing approved mine void. This is not located near any non-mine owned residences.

Yours faithfully

Steve McDonald
General Manager

NSW GOVERNMENT | Office of Environment & Heritage

DOC17/395820-1
SSD 17_8642

Mr Anthony Barnes
Senior Planning Officer, Resource Assessments
Department of Planning and Environment
anthony.barnes@planning.nsw.gov.au

Dear Mr Barnes

Input into Secretary's Environmental Assessment Requirements – Mangoola Coal Continued Operations Project – Wybong (SSD 17_8642)

I refer to your e-mail dated 31 June 2017 seeking input into the Secretary's Environmental Assessment Requirements (SEARs) for the proposed modification application for the Mangoola Coal Continued Operations Project, located on Wybong Road, Wybong. The project is within the Muswellbrook local government area.

The Office of Environment and Heritage (OEH) understands that Mangoola Coal Operations Pty Ltd (the proponent) seek to expand the existing mine in order to extract an additional 45 million tonnes of run-of-mine coal. OEH understands that the proposal is a State Significant Development under the *Environmental Planning and Assessment Act 1979*.

OEH has reviewed the preliminary documents and plans prepared by Umwelt (Australia) Pty Limited (dated July 2017). For biodiversity and threatened species matters, this project must be assessed under the Framework for Biodiversity Assessment (FBA) or, subject to agreement with OEH and the consent authority, under the Upper Hunter Strategic Assessment. The following requirements apply to the preparation of an FBA assessment.

OEH provides SEARs for the proposed development in **Attachments A, B, C, D** and **E**. An FBA assessment must be undertaken by a person accredited in accordance with section 142B(1)(c) of the *Threatened Species Conservation Act 1995* (TSC Act). Please note, the FBA does not provide an exemption for removal of the Biodiversity Assessment Report (BAR) where a proponent deems the site to be cleared and/or have no apparent ecological value due to current disturbance. Under the Major Project policy the proponent must conduct an assessment in accordance with the FBA and specifically provide a BAR (via an accredited assessor).

The proponent will need to ensure that the biodiversity assessment is fully consistent with requirements of the FBA. Guidance documents to assist with this process are provided in **Attachment E**.

OEH acknowledge the previously identified Aboriginal cultural heritage values associated with the project area. OEH notes that any Aboriginal cultural heritage assessment undertaken prior to 2010 may not meet current OEH Aboriginal cultural heritage guidelines for the assessment of Aboriginal

cultural heritage in NSW. The OEH 2011 *Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW* should be referenced in this instance.

If you require any further information regarding this matter please contact Robert Gibson, Regional Biodiversity Conservation Officer, on 4927 3154.

Yours sincerely

18/8/2014.

ANDREW MCINTYRE
Acting Director Hunter Central Coast Branch
Regional Operations Division

Enclosure: Attachments A - E

Attachment A – Standard Environmental Assessment Requirements

Biodiversity
1. Biodiversity impacts related to the proposed development are to be assessed and documented in accordance with the Framework for Biodiversity Assessment (FBA), or, subject to agreement with OEH and the consent authority, under the Upper Hunter Strategic Assessment. An FBA assessment must be undertaken by a person accredited in accordance with s142B(1)(c) of the *Threatened Species Conservation Act 1995.*
Aboriginal cultural heritage
2. The EIS must identify and describe Aboriginal cultural heritage values that exist across the whole area that will be affected by the development and document these in the EIS. 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 OEH regional officers.
3. Where Aboriginal cultural heritage values are identified, 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 EIS.
4. Impacts on Aboriginal cultural heritage values are to be assessed and documented in the EIS. The EIS must demonstrate attempts to avoid impact upon cultural heritage values and identify any conservation outcomes. Where impacts are unavoidable, the EIS must outline measures proposed to mitigate impacts. Any objects recorded as part of the assessment must be documented and notified to OEH.
Historic heritage
5. 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: 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.

Water and soils

6. The EIS must map the following features relevant to water and soils including:
   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 Appendix 2 of the Framework for Biodiversity Assessment.
   c. Groundwater.
   d. Groundwater dependent ecosystems.
   e. Proposed intake and discharge locations.

7. The EIS must describe background conditions for any water resource likely to be affected by the development, including:
   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 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.

8. The EIS must assess the impacts of the development on water quality, including:
   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.

9. The EIS must assess the impact of the development on hydrology, including:
   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.

Flooding and coastal erosion

10. The EIS must map the following features relevant to flooding as described in the Floodplain Development Manual 2005 (NSW Government 2005) including:
    a. Flood prone land
    b. Flood planning area, the area below the flood planning level.
    c. Hydraulic categorisation (floodways and flood storage areas).
11. 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.
12. The EIS must model the effect of the proposed development (including fill) on the flood behaviour under the following scenarios:
    a. Current flood behaviour for a range of design events as identified in 8) above. 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.
13. Modelling in the EIS must consider and document:
    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.
14. The EIS must assess the impacts on the proposed development on flood behaviour, including:
    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 or 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.

Attachment B – Project Specific Requirements

Biodiversity

A. Impacts on the species/populations/ecological communities listed in **Attachment C** will require further consideration and provision of the information specified in s9.2 of the Framework for Biodiversity Assessment.

B. The EIS must identify:

   a. In the case of a project that adjoins, is in the immediate vicinity or upstream of NPWS estate, the assessment of impacts must address the matters outlined in the *Guidelines for developments adjoining land and water managed by DECCW* (DECCW 2010) and include:

      i. The nature of the impacts, including direct and indirect impacts.

      ii. The extent of the direct and indirect impacts.

      iii. The duration of the direct and indirect impacts.

      iv. The objectives of the reservation of the land.

   b. Measures proposed to prevent, control, abate, minimise and manage the direct and indirect impacts including an evaluation of the effectiveness and reliability of the proposed measures.

   c. Residual impacts.

Aboriginal Cultural Heritage

C. Where the project's footprint occurs in areas identified by the EIS as sensitive ACH areas, surface surveys must be undertaken by a qualified archaeologist to determine the presence or absence of Aboriginal objects and the significance of those objects. The result of the surface survey is to inform the need for targeted subsurface test excavation to better assess the integrity, extent, distribution, nature and overall significance of the archaeological record. The results of surface surveys and test excavations undertaken at this stage are to be documented in the EIS.

D. Where the project's footprint is unknown at the submission of the EIS, point C above applies if the future footprint occurs in areas identified by the EIS as sensitive ACH areas.

E. The EIS must outline procedures to be followed if Aboriginal objects are found at any stage of the life of the project to formulate appropriate measures to manage unforeseen impacts.

F. The EIS must outline procedures to be followed in the event Aboriginal burials or skeletal material is uncovered during construction to formulate appropriate measures to manage the impacts to this material.

Cumulative Impact

G. The cumulative impacts from all clearing activities and operations, associated edge effects and other indirect impacts on cultural heritage, biodiversity and OEH Estate need to be comprehensively assessed in accordance with the *Environmental Planning and Assessment Act 1979.*

This should include the cumulative impact of the proponent's existing and proposed development and associated infrastructure (such as access tracks etc.) as well as the cumulative impact of other developments located in the vicinity. This assessment should include consideration of both construction and operational impacts.

Attachment C – Threatened Species and Threatened Ecological Communities Which Require Further Consideration

Class	Scientific Name	Common Name	NSW Status	Comm. Status
Flora	*Cynanchum elegans*	White-flowered Wax Plant	Endangered	Endangered
Flora	*Pomaderris sericea*	Silky Pomaderris	Endangered	Vulnerable
Flora	*Pultenaea glabra*	Smooth Bush-Pea	Vulnerable	Vulnerable
Fauna	*Aprasia parapulchella*	Pink-tailed Legless Lizard	Vulnerable	Vulnerable
Fauna	*Anthochaera phrygia*	Regent Honeyeater	Critically Endangered	Critically Endangered
Fauna	*Burhinus grallarius*	Bush Stone-curlew	Endangered	Not listed

Attachment D - Critically Endangered Entities Specifically Excluded From Requiring Further Consideration*

Class	Scientific Name	Common Name	NSW Status	Comm. Status
Flora	*Pomaderris reperta*	Denman Pomaderris	Critically Endangered	Critically Endangered
Fauna	*Pedionomus torquatus*	Plains-wanderer	Endangered	Critically Endangered
Fauna	*Lathamus discolor*	Swift Parrot	Endangered	Critically Endangered
EEC	White Box Yellow Box Blakelys Red Gum Woodland	White Box Yellow Box Blakelys Red Gum Woodland	Critically Endangered	Endangered Ecological Community
EEC	Hunter Valley Footslopes Slaty Gum Woodland in the Sydney Basin Bioregion	Hunter Valley Footslopes Slaty Gum Woodland in the Sydney Basin Bioregion	Critically Endangered	Vulnerable Ecological Community
EEC	Prasophyllum sp. Wybong	Prasophyllum sp. Wybong	Critically Endangered	Not listed
EEC	Central Hunter Grey Box-Ironbark Woodland in the New South Wales North Coast and Sydney Basin Bioregions	Central Hunter Grey Box-Ironbark Woodland in the New South Wales North Coast and Sydney Basin Bioregions	Critically Endangered	Endangered Ecological Community
EEC	Hunter Valley Weeping Myall Woodland in the Sydney Basin Bioregion	Hunter Valley Weeping Myall Woodland in the Sydney Basin Bioregion	Critically Endangered	Critically Endangered

* Further information, as detailed in section 9.2.5.2 of the FBA, is not required for the excluded entities above. However, assessment of impacts and offset requirements must still be included in the Biodiversity Assessment Report for these entities in accordance with the FBA.

Attachment E – Guidance material

Title	Web address
Relevant Legislation	
Coastal Protection Act 1979	www.legislation.nsw.gov.au/maintop/view/inforce/act+13+1979+cd+0+N
Commonwealth Environment Protection and Biodiversity Conservation Act 1999	www.austlii.edu.au/au/legis/cth/consol_act/epabca1999588/
Environmental Planning and Assessment Act 1979	www.legislation.nsw.gov.au/maintop/view/inforce/act+203+1979+cd+0+N
Fisheries Management Act 1994	www.legislation.nsw.gov.au/maintop/view/inforce/act+38+1994+cd+0+N
Marine Parks Act 1997	www.legislation.nsw.gov.au/maintop/view/inforce/act+64+1997+cd+0+N
National Parks and Wildlife Act 1974	www.legislation.nsw.gov.au/maintop/view/inforce/act+80+1974+cd+0+N
Protection of the Environment Operations Act 1997	www.legislation.nsw.gov.au/maintop/view/inforce/act+156+1997+cd+0+N
Threatened Species Conservation Act 1995	www.legislation.nsw.gov.au/maintop/view/inforce/act+101+1995+cd+0+N
Water Management Act 2000	www.legislation.nsw.gov.au/maintop/view/inforce/act+92+2000+cd+0+N
Wilderness Act 1987	www.legislation.nsw.gov.au/viewtop/inforce/act+196+1987+FIRST+0+N
Biodiversity	
NSW Biodiversity Offsets Policy for Major Projects (OEH, 2013)	www.environment.nsw.gov.au/resources/biodiversity/140672biopolicy.pdf
Framework for Biodiversity Assessment (OEH, 2013)	www.environment.nsw.gov.au/resources/biodiversity/140675fba.pdf
Fisheries NSW policies and guidelines	www.dpi.nsw.gov.au/fisheries/habitat/publications/policies,-guidelines-and-manuals/fish-habitat-conservation
List of national parks	www.environment.nsw.gov.au/NationalParks/parksearchatoz.aspx
Revocation, re-categorisation and road adjustment policy (OEH, 2012)	www.environment.nsw.gov.au/policies/RevocationOfLandPolicy.htm
Guidelines for developments adjoining land and water managed by OEH (DECCW, 2010)	www.environment.nsw.gov.au/resources/protectedareas/10509devadjdeccw.pdf
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)	www.environment.nsw.gov.au/resources/heritagebranch/heritage/hmstatementsofhi.pdf
NSW Heritage Manual (DUAP) 1996	www.environment.nsw.gov.au/Heritage/publications/index.htm#G-I

Aboriginal Cultural Heritage	
Aboriginal Cultural Heritage Consultation Requirements for Proponents (DECCW, 2010)	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)	www.environment.nsw.gov.au/resources/cultureheritage/10783FinalArchCoP.pdf
Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW (OEH 2011)	www.environment.nsw.gov.au/resources/cultureheritage/20110263ACHguide.pdf
Aboriginal Site Recording Form	www.environment.nsw.gov.au/resources/parks/SiteCardMainV1_1.pdf
Aboriginal Site Impact Recording Form	www.environment.nsw.gov.au/resources/cultureheritage/120558asirf.pdf
Aboriginal Heritage Information Management System (AHIMS) Registrar	www.environment.nsw.gov.au/contact/AHIMSRegistrar.htm
Care Agreement Application form	www.environment.nsw.gov.au/resources/cultureheritage/20110914TransferObject.pdf
Water and Soils	
Acid sulphate soils	
Acid Sulfate Soils Planning Maps via 'The NSW Natural Resource Atlas'	www.nratlas.nsw.gov.au/
Acid Sulfate Soils Manual (Stone et al. 1998)	www.planning.nsw.gov.au/rdaguidelines/documents/NSW%20Acid%20Sulfate%20Soils%20Planning%20Guidelines.pdf
Acid Sulfate Soils Laboratory Methods Guidelines (Ahern et al. 2004)	http://www.advancedenvironmentalmanagement.com/Reports/Savannah/Appendix%2015.pdf This replaces Chapter 4 of the Acid Sulfate Soils Manual above.
Flooding and Coastal Erosion	
Reforms to coastal erosion management	www.environment.nsw.gov.au/coasts/coastalerosionmgmt.htm
Floodplain development manual	www.environment.nsw.gov.au/floodplains/manual.htm
Guidelines for Preparing Coastal Zone Management Plans	Guidelines for Preparing Coastal Zone Management Plans www.environment.nsw.gov.au/resources/coasts/130224CZMPGuide.pdf
NSW Climate Impact Profile	NSW Climate Impact Profile
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	www.environment.nsw.gov.au/ieo/index.htm
ANZECC (2000) Guidelines for Fresh and Marine Water Quality	www.environment.gov.au/water/publications/quality/australian-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)	www.environment.nsw.gov.au/resources/legislation/approvedmethods-water.pdf

15 August 2017

CR2017/002886
SF2012/014018
DC

Resource Assessments
NSW Department of Planning & Environment
GPO Box 39
SYDNEY NSW 2001

Attention: Anthony Barnes

DENMAN ROAD (MR209): MANGOOLA COAL CONTINUED OPERATIONS, WYBONG ROAD, WYBONG – REQUEST FOR THE SECRETARY'S ENVIRONMENTAL ASSESSMENT REQUIREMENTS – SSD 17_8642

I refer to your email dated 28 July 2017 requesting Roads and Maritime Services' (Roads and Maritime) requirements under Schedule 2 of the *Environmental Planning and Assessment Regulation 2000* for the Mangoola Coal Continued Operations.

Roads and Maritime understands that the Mangoola Coal Continued Operations (MCCO) project will allow for the continuation of mining at Mangoola Coal Mine into a new mining area to the north of the existing operations to extract an additional 45 Mt run of mine Coal.

The MCCO Project will utilise the existing infrastructure, emplacement areas and equipment at Mangoola Coal Mine and generally comprises:

- Open cut mining at the same rate as that currently approved (13.5 million tonnes per annu, of run of mine (ROM) coal using truck and excavator mining methods;
- Mining operations in a new mining area north of the existing Mangoola Coal Mine;
- Construction of a haul road overpass over Big Flat Creek and Wybong Road to provide access from the existing mine to the proposed Additional Mining Area.
- Realignment of a portion of Wybong Post Office Road;

- Continued use of the mine access for the existing operational mine and access to /from Wybong Road, Wybong Post Office Road or Ridgelands Road to the MCCO Project Area for construction, emergency service and ongoing operational environmental monitoring.

Roads and Maritime Response

The EIS should refer to the following guidelines with regard to the traffic and transport impacts of the proposed development:

- Department of Planning EIS Guidelines
    - Road and Related Facilities
- Roads and Maritime's *Guide to Traffic Generating Developments 2002*
    - Section 2 Traffic Impact Studies

Furthermore, a traffic and transport study shall be prepared in accordance with Austroads Guide to Traffic Management Part 12 and the Roads and Maritime'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.
- Identification of the anticipated additional vehicular traffic generated from both the construction and operational stages of the project.
- 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, in particular, the intersections of the Wybong Road / Denman Road and Wybong Road / Golden Highway, 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.
- Identification of 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 Roads and Maritime 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 Roads and Maritime 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.

Should you require further information please contact Hunter Land Use on 4924 0688 or by email at development.hunter@rms.nsw.gov.au.

Yours sincerely

Peter Marler
Manager Land Use Assessment
Hunter Region

NSW RURAL FIRE SERVICE

Director General
Planning & Environment
GPO Box 39
Sydney NSW 2001

Your reference: SSD 17_8642
Our reference: D17/2565
DA17080108500

15 August 2017

Attention: Anthony Barnes

Dear Sir/Madam,

Request for DGRs for State Significant Development. Proposal: Mangoola Coal Continued Operations. Wybong Road Wybong. SSD 17_8642

Reference is made to the Department's correspondence dated 28 July 2017 seeking the NSW Rural Fire Service's (NSW RFS) requirements for the preparation of an Environment Impact Statement (EIS) for the above State Significant Development in accordance with Part 4 of the Environmental Planning & Assessment Act 1979.

The NSW RFS has reviewed the information provided on the proposal and provides the following comments:

- The site and surrounding landscape is mapped as bush fire prone land on the Muswellbrook Bush Fire Prone Land Map.
- The development has the potential to be impacted upon by a bush fire starting either outside or within the site.
- The NSW RFS is the primary response agency for both a bush fire and structural fire impacting on the development and associated infrastructure.
- A bush fire risk assessment shall be prepared for the site and the proposed development with consideration of the aims and objectives of *Planning for Bushfire Protection 2006*, and shall form part of the EIS.
- The assessment should include a description of the existing bush fire management strategies at the Mangoola Mine, an assessment of the potential bush fire hazards and details of the proposed bush fire management for the project.
- The bush fire management plan should include but not limited to the following:
    - Contact person and 24 hour contact phone number;
    - Schedule and description of bush fire mitigation works;
    - Location of managed and unmanaged vegetation within the site;
    - A plan showing access within the site, location of available water supply for fire fighting purposes, location and storage of bulk flammable liquids and materials and explosives;
    - An Emergency / Evacuation Plan.

Postal address
NSW Rural Fire Service
Records Management
Locked Bag 17
GRANVILLE NSW 2141

Street address
NSW Rural Fire Service
Planning and Environment Services (East)
42 Lamb Street
GLENDENNING NSW 2761

T 1300 NSW RFS
F (02) 8741 5433
E csc@rfs.nsw.gov.au
www.rfs.nsw.gov.au

If you have any queries regarding this advice, please contact Garth Bladwell, Development Assessment and Planning Officer, on 1300 NSW RFS.

Yours sincerely,

Nika Fomin
Manager, Planning and Environment Services (East)

ATTACHMENT 3

Commonwealth Department of Environment and Energy assessment requirements

Guidelines for preparing assessment documentation relevant to the EPBC Act for proposals being assessed under an accredited NSW assessment process

Mangoola Continued Operations Project (EPBC 2018/8280) (SSD 8642)

Introduction

1. On 21 January 2019, a delegate of the Federal Minister for the Environment and Energy determined that the Mangoola Coal Continued Operations Project was 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:

    i. listed threatened species and communities (sections 18 and 18A); and

    ii. a water resource, in relation to coal seam gas development and large coal mining development (section 24D & section 24E).

    On 14 February 2019, the same delegate confirmed that the proposed action will be assessed under the State's accredited assessment process under Part 4 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) in accordance with the bilateral agreement between governments. These guidelines provide information on MNES environmental assessment requirements.

2. The Applicant must undertake an assessment of all protected matters that may be impacted by the development under the controlling provisions identified in paragraph 1. The Commonwealth Department of the Environment and Energy (DoEE) considers that there is likely to be a significant impact on the following:

    i. White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland – Critically Endangered Ecological Community: the proposed action will result in the loss of 24 ha of habitat critical to the survival of this community;

    ii. *Prasophyllum* sp. Wybong – Critically Endangered: the proposed action will result in the removal of approximately 691 individuals, loss of habitat as well as indirect impacts to the remaining population;

    iii. Regent Honeyeater (*Anthochaera phrygia*) - Critically Endangered: the proposed action will result in the removal of key foraging resources which are habitat critical to the survival of this species; and

    iv. Water resources: the proposed action is likely to result in changes to groundwater and surface water and impact on surface water quality.

3. DoEE also considers that the proposed action may result in significant impacts to the following species:

    i. Swift Parrot (*Lathamus discolor*) – Critically Endangered; and

    ii. Grey-headed Flying-fox (*Pteropus poliocephalus*) – Vulnerable

    Further information on the total area and quality of habitat to be impacted by the proposed action will be required during the assessment stage, to determine if significant impacts to these species are likely.

4. The Applicant must consider each of the protected matters under the triggered controlling provisions that may be impacted by the action. Noting that paragraphs 2 and 3 may not be a complete list, it is the responsibility of the Applicant to undertake an analysis of the relevant impacts and ensure all protected matters that are likely to be impacted are assessed for the Commonwealth Minister's consideration.

Protected matters can be identified using DoEE's Protected Matters Search Tool http://www.environment.gov.au/epbc/protected-matters-search-tool and Species Profiles and Threats Database (SPRAT, http://www.environment.gov.au/cgi-bin/sprat/public/sprat.pl).

General Requirements

Relevant Regulations

5. The Environmental Impact Statement (EIS) must address the matters outlined in Schedule 4 of the EPBC Regulations and the matters outlined below in relation to the controlling provisions.

Project Description

6. The title of the action, background to the action of the action and current status.
7. The precise location and description of all works to be undertaken (including associated offsite works and infrastructure), structures to be built or elements of the action that may have impacts on MNES.
8. How the action relates to any other actions that have been, or are being taken in the region affected by the action.
9. How the works are to be undertaken and design parameters for those aspects of the structures or elements of the action that may have relevant impacts on MNES.

Impacts

10. The EIS must include an assessment of the relevant impacts[1] of the action on the matters protected by the controlling provisions, including:
    i. a description and detailed assessment of the nature and extent of the likely direct, indirect and consequential impacts, including short term and long term relevant impacts;
    ii. a statement whether any relevant impacts are likely to be unknown, unpredictable or irreversible;
    iii. analysis of the significance of the relevant impacts; and
    iv. any technical data and other information used or needed to make a detailed assessment of the relevant impacts.

Avoidance, mitigation and offsetting

11. For each of the relevant matters protected that are likely to be significantly impacted by the action, the EIS must provide information on proposed avoidance and mitigation measures to manage the relevant impacts of the action including:
    i. a description, and an assessment of the expected or predicted effectiveness of the mitigation measures,
    ii. any statutory policy basis for the mitigation measures;
    iii. the cost of the mitigation measures;
    iv. an outline of an environmental management plan that sets out the framework for continuing management, mitigation and monitoring programs for the relevant impacts of the action, including any provisions for independent environmental auditing;
    v. the name of the agency responsible for endorsing or approving each mitigation measure or monitoring program.
12. Where a significant residual adverse impact to a relevant protected matter is considered likely, the EIS must provide information on the proposed offset strategy, including discussion of the conservation benefit associated with the proposed offset strategy.

[1] Relevant impacts are those impacts likely to significantly impact on any matter protected under the EPBC Act

Key Issues

Biodiversity (threatened species and communities and migratory species)

Comments

13. Significant impacts associated with proposed action on MNES are associated with the removal of native vegetation, in particular the removal of 691 ha of *Prasophyllum sp*. Wybong individuals and the loss of up to 256 ha of habitat critical to the survival of the Regent Honeyeater. These impacts must be appropriately offset for EPBC Act purposes.

Assessment Requirements

For each of the EPBC Act listed species predicted to occur in the project site, and each of the EPBC Act listed ecological communities likely to be significantly impacted, the EIS/biodiversity assessment report (BAR) must provide:

a) 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 and/or the NSW Framework for Biodiversity Assessment (FBA).

b) 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 listing advices, conservation advices, recovery plans, and threat abatement plans. [Note: the relevant guidelines and policy statements for each species and community are available on the SPRAT website]

c) Maps displaying the above information (specific to each EPBC protected matter) 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 FBA 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 community, and provide individual maps for each species or community.

d) 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.

e) For each of the EPBC Act listed species and communities likely to be impacted by the development, the EIS must provide 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.

f) 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 of protection. All suitable habitat for MNES significantly impacted must be offset.

   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'. Like-for-like includes protection of native vegetation that is the same EEC or habitat being impacted, or funding to provide a direct benefit to the matter being impacted i.e. threat abatement, breeding and propagation programs or other relevant conservation measures.

14. Offsetting impacts to the *Prasophyllum sp*. Wybong: As *Prasophyllum sp*. Wybong is not a threatened species under the *NSW Biodiversity Conservation Act 2016*, DoEE will accept the credit liability generated for *Prasophyllum petilum* as the credit liability for *Prasophyllum sp*. Wybong, subject to being satisfied that the proposed offsets meet the offset requirements under the EPBC Act.

Water resource, in relation to coal seam gas development and large coal mining development

Assessment Requirements

15. The EIS must include a detailed assessment of the potential impacts of the proposed action on water resources. The water assessment must be undertaken in accordance with the IESC Information Guidelines (http://iesc.environment.gov.au/publications/information-guidelines-independent-expert-scientific-committee-advice-coal-seam-gas) and provide the information outlined in these guidelines including:

    a) Hydrogeological assessment:

        i. Provision of hydrogeological conceptualisations.

        ii. Descriptions of geology and hydrogeology.

        iii. Predictions of groundwater changes over the life of the proposed project (e.g. using numerical groundwater models).

        iv. Predictions of groundwater recovery beyond the life of the proposed project (e.g. using numerical groundwater models).

        v. Reference all of the above to analysis on groundwater quality and quantity data gathered from the existing project.

    b) Surface water assessment:

        i. An assessment of predicted changes to surface water flows and flood extents (e.g. using numerical model).

        ii. Provision of mine water balances detailing onsite storages and discharge to surface water requirements.

        iii. Reference all of the above to analysis on surface water quality and quantity data gathered from the existing project.

    c) Ecological and ecohydrological assessment:

        i. Conceptualisation of the impacts of water resource regimes and changes on biodiversity.

        ii. Potential impacts from temporal and spatial changes in terrestrial surface water flows and quality in relation to fine-scale topographic features (e.g. soaks, drainage systems, depressions, soil saturation) for known habitat within the two sub-catchments that currently, or may potentially (future colonization), support *Prasophyllum sp. Wybong*.

        iii. Potential impacts from temporal and spatial changes and quality of water resources (terrestrial surface and groundwater) in relation to fine-scale topographic features (riparian and flood zones) within the two sub-catchments that support *White Box – Yellow Box – Blakely's Red Gum Grassy Woodland and Derived Native Grassland*.

        iv. In addition to ephemeral creeks, consider potential impacts from temporal and spatial changes and quality of water resources (surface and groundwater) on associated riparian vegetation and aquatic ecosystems (including stream and creek aquatic biota) of the Wybong, Sandy and Alvil Creeks.

    d) Cumulative impact assessment:

        i. Identify all surrounding existing and known future operations that could contribute cumulatively to surface water and groundwater impacts.

        ii. The proposed project area is within the Hunter Subregion of the Northern Sydney Basin Bioregional Assessment (BA) area. While the proposed extension is not within the BA 'additional coal resource developments' pathway, the proponent should consider cumulative impacts with reference to the BA assessment.

    e) Final landform and rehabilitation assessment:

        i. Provision of a rehabilitation strategy.

        ii. Predictions of final void water quality and quantity.

        iii. Discussion on re-equilibration of groundwater and eventual discharges to the environment.

iv. Comprehensive risk assessment.

Other approvals and conditions

16. Information in relation to any other approvals or conditions required must include the information prescribed in Schedule 4 Clause 5 (a) (b) (c) and (d) of the EPBC Regulations 2000.

Environmental Record of person proposing to take the action

17. Information in relation to the environmental record of a person proposing to take the action must include details as prescribed in Schedule 4 Clause 6 of the EPBC Regulations 2000.

Information Sources

18. For information given in an EIS, the EIS must state the source of the information, how recent the information is, how the reliability of the information was tested; and what uncertainties (if any) are in the information.

Anticipated Engagement

19. A draft EIS should be provided to DoEE prior to finalisation to ensure the above assessment requirements have been met.

REFERENCES

- *Environment Protection and Biodiversity Conservation Act 1999* - section 51-55, section 96A(3)(a)(b), 101A(3)(a)(b), section 136, section 527E
- *Environment Protection and Biodiversity Conservation Regulations 2000 Schedule 4*
- NSW Assessment Bilateral Agreement (2015) - Item 18.1, Item 18.5, Schedule 1
- *Matters of National Environmental Significance - Significant impact guidelines 1.1* (2013) EPBC Act
- *Environment Protect and Biodiversity Conservation Act 1999* Environmental Offsets Policy October 2012
- *Information Guidelines for Independent Expert Scientific Committee advice on coal seam gas and large coal mining development proposals (2014)*

EPBC Ref: 2018/8280

Mr Brian Pease
Project Manager
Mangoola Coal Operations Pty Ltd
PO Box 425
MUSWELLBROOK NSW 2333

Dear Mr Pease,

Decision on referral
Mangoola Coal Continued Operations Project, NSW

Thank you for submitting a referral under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). This is to advise you of my decision about the referral of the proposed action, to establish a new open cut coal pit to extract approximately 45 million tonnes over the life of the mine, as well as associated infrastructure including roads, overburden areas and water management systems within the Mangoola landholdings.

As a delegate of the Minister for the Environment, I have decided under section 75 of the EPBC Act that the proposed action is a controlled action and, as such, it requires assessment and a decision about whether approval for it should be given under the EPBC Act.

The information that I have considered indicates that the proposed action is likely to have a significant impact on the following matters protected by the EPBC Act:

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

Based on the information available in the referral, the proposed action is likely to have a significant impact on the following matters of national environmental significance:

- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (Box-Gum Grassy Woodland) – critically endangered ecological community: As the proposed action will result in the loss of 24 ha of habitat critical to the survival of the ecological community.
- *Prasophyllum* sp. Wybong – critically endangered: As the proposed action will result in the removal of approximately 691 individuals, loss of habitat as well as indirect impacts to the remaining population.
- Regent Honeyeater (*Anthochaera Phrygia*) – critically endangered: As the proposed action will result in the removal of key foraging resources which are habitat critical to the survival of this species.

- Water resources: As the proposed action is likely to result in changes to groundwater and surface water and impact on surface water quality.

The Department also considers that the proposed action may result in significant impacts to the following species:

- Swift Parrot (*Lathamus discolor*) – critically endangered
- Grey-headed Flying-fox (*Pteropus poliocephalus*) – vulnerable

Further information will be required, during the assessment stage, to determine if significant impacts to these species are likely.

Please note, this may not be a complete list. If additional or greater impacts on any other listed threatened species or community are identified during the assessment stage, it is the responsibility of the proponent to ensure that all relevant protected matters are assessed for the Minister's consideration.

A copy of the document recording this decision is enclosed. Please note that this decision only relates to the potential for significant impacts on matters protected by the Australian Government under Chapter 2 of the EPBC Act.

At this stage, a decision has not been made on the approach that must be used to assess the project. You should expect to receive further advice on this issue within 10 business days.

Please note, under subsection 520(4A) of the EPBC Act and the *Environment Protection and Biodiversity Conservation Regulations 2000*, your assessment is subject to cost recovery. A fee schedule will be provided when the assessment approach decision has been made.

If you disagree with the fee schedule provided, you may apply under section 514Y of the EPBC Act for reconsideration of the method used to work out the fee.
The application for reconsideration must be made within 30 business days of the date of this letter and can only be made once for a fee. Further details regarding the reconsideration process can be found on the Department's website at: http://www.environment.gov.au/protection/environment-assessments/assessment-and-approval-process/refer-proposed-action.

I have also written to the NSW Department of Planning and Environment (DPE) to advise of this decision.

You may elect under section 132B of the EPBC Act to submit a management plan for approval at any time before the Minister makes an approval decision of the proposed action under section 133 of the EPBC Act.

If an election is made under section 132B of the EPBC Act, cost recovery will apply to the approval of any action management plans you submit.

Cost recovery does not apply to the approval of action management plans where you do not elect to submit an action management plan for approval under section 132B of the EPBC Act and the approval of the action management plan does not arise from a variation to the approval conditions that you have requested.

Where you vary an approval condition and it results in you being required to submit an action management plan for approval, cost recovery will apply to the approval of the action management plan. Please refer to Attachment A for more details.

Please also note that once a proposal to take an action has been referred under the EPBC Act, it is an offence under section 74AA to take the action while the decision making process is on-going (unless that action is specifically excluded from the referral or other exemptions apply). Persons convicted of an offence under this provision of the EPBC Act may be liable for a penalty of up to 500 penalty units. The EPBC Act is available on line at: http://www.environment.gov.au/epbc/about/index.html.

The Department has recently published an *Environmental Impact Assessment Client Service Charter* (the Charter) which outlines the Department's commitments when undertaking environmental impact assessments under the EPBC Act. A copy of the Charter can be found at: http://www.environment.gov.au/epbc/publications/index.html.

If you have any questions about the referral process or this decision, please contact the project manager, Corinne Lawless, by email to corinne.lawless@environment.gov.au, or telephone (02) 6274 1442 and quote the EPBC reference number shown at the beginning of this letter.

Yours sincerely

Dane Roberts
Acting Assistant Secretary
Assessments and Waste Branch
21 January 2019

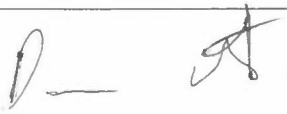
Notification of
REFERRAL DECISION AND DESIGNATED PROPONENT – controlled action

Mangoola Coal Continued Operations Project, NSW (2018/8280)

This decision is made under section 75 of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

proposed action	To establish a new open cut coal pit to extract approximately 45 million tonnes over the life of the mine, as well as associated infrastructure including roads, overburden areas and water management systems within the Mangoola landholdings. [See EPBC Act referral 2018/8280]
decision on proposed action	The proposed action is a controlled action. The project will require assessment and approval under the EPBC Act before it can proceed.
relevant controlling provisions	• Listed threatened species and communities (sections 18 & 18A) • A water resource, in relation to coal seam gas development and large coal mining development (section 24D & 24E)
designated proponent	Mangoola Coal Operations PTY Limited ACN 127535755
assessment approach	To be advised.

Decision-maker

Name and position	Dane Roberts Acting Assistant Secretary Assessments and Waste Branch
Signature	
date of decision	21/1/2019

EPBC Ref: 2018/8280

Mr Brian Pease
Project Manager
Mangoola Coal Operations Pty Ltd
PO Box 425
MUSWELLBROOK NSW 2333

Dear Mr Pease

Mangoola Coal Continued Operations Project, NSW

On 21 January 2019, a delegate of the Minister for the Environment wrote to you to inform you that the Mangoola Coal Continued Operations Project was a controlled action under the EPBC Act. You were also notified that a decision on the assessment approach had not been made.

I am writing to inform you that the NSW Government has advised the Department that your project will be assessed by bilateral agreement under the NSW *Environmental Planning and Assessment Act 1979*.

Please note, under subsection 520(4A) of the EPBC Act and the *Environment Protection and Biodiversity Conservation Regulations 2000*, your assessment is subject to cost recovery. Please find attached a copy of the fee schedule for your proposal.

Please note that for an assessment under a bilateral agreement, the Minister may determine that fees are not applicable for stages where the Commonwealth does not undertake any assessment. In this case, assessment Stage 1 and Stage 2 will be managed by the New South Wales Department of Planning and Environment, so you will not be charged or invoiced for these stages. Fees will be payable prior to the commencement of each relevant subsequent stage of the assessment.

Further details on cost recovery are available on the Department's website at: environment.gov.au/epbc/cost-recovery.

If you disagree with the fee schedule provided, you may apply under section 514Y of the EPBC Act for reconsideration of the method used to work out the fee.
The application for reconsideration must be made within 30 business days of the date of this letter and can only be made once for a fee. Further details regarding the reconsideration process can be found on the Department's website at: environment.gov.au/protection/environment-assessments/assessment-and-approval-process/refer-proposed-action.

You may elect under section 132B of the EPBC Act to submit a management plan to be considered during the assessment at any time before an approval decision is made. Please note, if a management plan is submitted or revised after approval, it may incur additional fees under cost recovery.

If you have any questions about the assessment process or this decision, please contact the project manager, Corinne Lawless, by email to corinne.lawless@environment.gov.au, or telephone (02) 6274 1442 and quote the EPBC reference number shown at the beginning of this letter.

Yours sincerely

Mike Smith
A/g Assistant Secretary
Assessments and Waste Branch
14 February 2019

Site Verification Certificate

Mangoola Coal Continued Operations Project – (SVC 9512)

Part 4AA, Division 3 of *State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007*

Pursuant to clause 17C(1) of the *State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007*, I determine the application made by Mangoola Coal Operations Pty Ltd by issuing this certificate.

I certify that in my opinion, having regard to the criteria in the *Interim protocol for site verification and mapping of biophysical strategic agricultural land*, the Verification Application Area land specified in Schedule 1 is not Biophysical Strategic Agricultural Land.

The reasons for forming this opinion against relevant criteria, are contained in Schedule 2.

Deputy Secretary
As delegate of the Secretary
Date certificate issued: 10 December 2018

This certificate will remain current for 5 years from the date of issue.

SCHEDULE 1


RIDGELAND ROAD
CASTLEROCK ROAD
WYBONG ROAD
WYBONG POST OFFICE ROAD
MANGOOLA ROAD
GOLDEN HIGHWAY
KEY
ML 1626
ML 1741
MCCO project area
MCCO additional project area
MCCO additional project area - 100m buffer
Approved Mangoola Coal Mine disturbance area
AL9 boundary
Proposed overpass
MCCO proposed additional mining area
Proposed emplacement area
Indicative Wybong Post Office Road realignment
500kV transmission line
Main road
Local road
Rail line
Watercourse / drainage line
Mangoola Coal Continued Operations project layout
Mangoola Coal Continued Operations Project
BSAL assessment
Figure 1.2
EMM

SCHEDULE 2

Relevant criteria	Consideration
Soil slope	No Exclusion Zone for land areas greater than 10% slope were identified and excluded from the soil survey.
Contiguous land	No Exclusion Zone for land areas less than 20 contiguous hectares total size were identified and excluded from the soil survey.
Physical constraints	Soil types identified in the soil survey include various limitations to land use including poor drainage, structure decline, acidity and shallow soils. In accordance with the Interim Protocol, this excludes these soil types from being considered BSAL.