

Secretary's Environmental Assessment Requirements

Section 78A(8A) of the *Environmental Planning and Assessment Act 1979*

State Significant Development

Application Number	SSD 15_7142
Proposal	The United and Wambo Open Cut Coal Mine Project, which includes: • operation of a multi-seam open cut mining operation integrating existing open cut operations at Wambo Mine with a proposed new open cut coal mine at United Mine; • open cut mining operations to produce up to 10 million tonnes per annum for up to 25 years from a total economically recoverable reserve of approximately 110 million tonne of ROM coal; • extension of the Wambo Mine boundary resulting in approximately 5 hectares of additional disturbance; • construction of temporary construction facilities in the United mining infrastructure area; • expansion and upgrade of the Wambo mining infrastructure area; • realignment of a 2 kilometre section of Golden Highway to accommodate the proposed open cut; • relocation of an existing 330 kV transmission line; • construction of reject emplacement areas, service and monitoring bores and associated infrastructure; • use of existing Wambo Mine coal handling and processing plant, coal handling facilities and train loading facility; • transportation of processed coal by rail to market; and • decommissioning all site infrastructure on completion of operations, and rehabilitating the site.
Location	Golden Highway, Warkworth approximately 1 kilometre north-east of the village of Warkworth.
Applicant	United Collieries Pty Ltd
Date of Issue	15 December 2015
General Requirements	The Environmental Impact Statement (EIS) for the development must comply with the requirements in Clauses 6 and 7 of Schedule 2 of the <i>Environmental Planning and Assessment Regulation 2000</i>. In particular, the EIS must include: • an executive summary; • a full description of the development, including: – historical mining operations on the site; – the resource to be extracted, demonstrating efficient resource recovery within environmental constraints; – the proposed mine layout and scheduling; – minerals processing and transport; – proposed infrastructure and facilities (including any existing infrastructure or infrastructure that would be required for the development, but the subject of a separate approvals process); – a waste (overburden, rejects, tailings, etc) management strategy, having regard to the EPA's requirements (see Attachment 2); – a water management strategy, having regard to the EPA's and NOW's requirements (see Attachment 2); – a rehabilitation strategy, having regard to DRE's requirements (see Attachment 2); – the proposed interactions between the development and the existing and approved operations at Wambo Mine and United Mine (including any relevant statutory approvals, environmental management regimes and biodiversity offset areas relating to these operations); and – 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 list of any approvals that must be obtained before the development may commence; • a risk assessment of the potential environmental impacts of the project, identifying the key issues; • an assessment of the likely impacts of the development on the environment, focusing on the specific issues identified below, including: – a description of the existing environment likely to be affected by the development, using sufficient baseline data; – an assessment of the likely impacts for all stages of the development, including appropriate worst case scenarios and consideration of any cumulative impacts, and having regard to any relevant laws, 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: ○ whether these measures are consistent with industry best practice, and represent the full range of reasonable and feasible mitigation measures that could be implemented; ○ the likely effectiveness of these measures, including performance measures where relevant; and ○ whether contingency measures (including Trigger Action Response Plans) 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 if it is approved; • a consolidated summary of all the proposed environmental management and monitoring measures, identifying all the commitments in the EIS; • consideration of the development against all relevant environmental planning instruments (including Part 3 of the <i>State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007</i>); • a conclusion justifying why the development should be approved, taking into consideration: ○ alternatives; ○ the suitability of the site; ○ the economic, social, biophysical and environmental impacts of the project as a whole; and ○ whether the project is consistent with the objects of the <i>Environmental Planning and Assessment Act 1979</i>. • 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 <i>Environmental Planning and Assessment Regulation 2000</i>, 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 <i>Environmental Planning and Assessment Regulation 2000</i>) of the development, including details of all the assumptions and components from which the capital investment value calculation is derived; and • jobs that would be created during each stage of the development.
Specific Issues	The EIS must address the following specific issues: • Agriculture – including: - an assessment of the likely impacts of the development on the soils

and land capability of the site, paying particular attention to the recommendations of any required Gateway Certificate or Site Verification Certificate relating to the assessment of Biophysical Strategic Agricultural Land (BSAL) and Critical Industry Cluster land, and having regard to the EPA's, DRE's and NOW's requirements (see Attachment 2);

- justification for any significant long term changes to the potential agricultural productivity of land post-mining, paying particular attention to any highly productive agricultural land that would be affected by 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*;

- **Air** – including:

- a detailed assessment of the likely air quality impacts of the development in accordance with the *Approved Methods and Guidance for the Modelling and Assessment of Air Pollutants in NSW* and the EPA's additional requirements (see Attachment 2); and
- an assessment of the likely greenhouse gas impacts of the development, having regard to the EPA's requirements (see Attachment 2);

- **Rehabilitation and Final Landform** – including

- an assessment of the likely impacts of the development on existing landforms and topography, including justification of the final landform design and its long term geotechnical stability;
- a detailed description of the progressive rehabilitation measures that would be implemented for the development and how this rehabilitation would integrate with the final landform of the mine;
- a detailed description of the proposed rehabilitation and mine closure strategies for the project, having regard to the key principles in *Strategic Framework for Mine Closure*, and the:
 - o rehabilitation objectives, methodology, monitoring programs, performance standards and proposed completion criteria;
 - o decommissioning and management of surface infrastructure;
 - o nominated final land uses, having regard to any relevant strategic land use planning or resource management plans or policies; and
 - o 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 management of the site and any biodiversity offset areas following the cessation of mining;

- **Noise & Blasting** – including:

- a detailed assessment of the likely operational noise impacts of the development (including construction noise) under the *NSW Industrial Noise Policy*, paying particular attention to the obligations in chapters 8 and 9 of the policy;
- if a claim is made for specific construction noise criteria for certain activities, then this claim must be justified and accompanied by an assessment of the likely construction noise impacts of these activities under the *Interim Construction Noise Guideline*;
- an assessment of the likely road noise impacts of the development under the *NSW Road Noise Policy*;
- an assessment of the likely rail noise impacts of the development under the *Rail Infrastructure Noise Guideline*; and
- a detailed assessment of the likely blasting impacts of the development (including noise, vibrations, overpressure, visual and odour) on people, livestock, heritage items, infrastructure and significant natural features, having regard to the relevant ANZECC guidelines and relevant agency requirements (see Attachment 2);

- **Visual** – including a detailed assessment of the likely visual impacts of the development (including dust, blasting and night lighting) on surrounding private landowners and key vantage points in the public

	domain, paying particular attention to impacts on, private residences, tourists and road users; • 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: - an assessment of the water balance over the life of the development (including post mining) and the availability of water supplies to meet operational requirements; - an assessment of the likely impacts of the development on the quantity and quality of existing surface and groundwater resources, having regard to the EPA's and NOW's requirements (see Attachment 2); - an assessment of the likely impacts of the development on aquifers, watercourses, riparian land, water-related infrastructure, and other water users; an assessment of the likely flooding impacts of the development; and - a detailed description of the measures that would be implemented to minimise water discharges and mitigate surface and groundwater impacts. • Biodiversity – including an assessment of the likely biodiversity impacts of the development, having regard to the <i>NSW Biodiversity Offsets Policy for Major Projects</i>, OEH's requirements (see Attachment 2) and Department of Environment's requirements (see Attachment 3); and • a description of the measures that would be implemented to avoid, minimise, manage and/or mitigate impacts on biodiversity; • Heritage – including: - an assessment of the likely impacts of the development on Aboriginal heritage (cultural and archaeological), including consideration of the significance of these objects or declared places to Aboriginal people and having regard to the OEH's requirements (see Attachment 2); - an assessment of the likely impacts of the development on non-Aboriginal heritage, paying particular attention to its settlement by Europeans and pastoral history and having regard to the OEH's requirements (see Attachment 2); and - evidence of consultation, noting that consultation carried out for the original Wambo Mine and United Mine may be relied upon, but should be augmented with further consultation for this project; • Transport – including an assessment of the likely transport impacts of the development on the capacity, condition, safety and efficiency of the local and State road and rail networks, having regard to RMS's and Singleton Shire Council's requirements (see Attachment 2) and paying particular attention to the proposed realignment of the Golden Highway; • Public Safety – 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 having regard to the HNE Population Health requirements (see Attachment 2); and • Social & Economic – including: - a detailed assessment of the likely social impacts of the development on the local and regional community; and - a detailed assessment of the likely economic impacts of the development, paying particular attention to: ○ the significance of the resource; ○ 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	In preparing the EIS for the development, you should consult with relevant local, State or Commonwealth Government authorities, infrastructure and service providers, community groups and affected landowners. In particular you must consult with the: • Commonwealth Department of the Environment;

	• NSW Office of Environment and Heritage (including the Heritage Branch); • NSW Environment Protection Agency; • NSW Division of Resources and Energy within the Department of Trade and Investment, Regional Infrastructure and Services; • NSW Department of Primary Industries (including the NSW Office of Water; NSW Forestry, Agriculture and Fisheries sections; and the Crown Lands Division); • NSW Roads and Maritime Services; • NSW Health; • Australian Rail Track Corporation and the Hunter Valley Coal Chain Co-ordinator; • NSW Dams Safety Committee; • Mine Subsidence Board; • Transgrid; and • Singleton Shire Council. The EIS must describe the consultation that was carried out, identify the issues raised during this consultation, and explain how these issues have been addressed in the EIS.
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ATTACHMENT 1

Environmental Planning Instruments, Policies, Guidelines & Plans

Land	
	Agfact AC25: Agricultural Land Classification (NSW Agriculture)
	Interim Protocol for Site Verification & Mapping of Biophysical Strategic Land (OEH)
	Soil and Landscape Issues in Environmental Impact Assessment (NOW)
	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 2003
Groundwater	NSW State Groundwater Policy Framework Document (NOW)
	NSW State Groundwater Quality Protection Policy (NOW)
	NSW State Groundwater Quantity Management Policy (NOW)
	NSW Aquifer Interference Policy 2012 (NOW)
	Australian Groundwater Modelling Guidelines 2012 (Commonwealth)
	National Water Quality Management Strategy Guidelines for Groundwater Protection in Australia (ARMCANZ/ANZECC)
	Guidelines for the Assessment & Management of Groundwater Contamination (EPA)
Surface Water	Hunter River Salinity Trading Scheme (EPA)
	NSW State Rivers and Estuary Policy (NOW)
	NSW Government Water Quality and River Flow Objectives (EPA)
	Using the ANZECC Guideline and Water Quality Objectives in NSW (EPA)
	National Water Quality Management Strategy: Australian Guidelines for Fresh and Marine Water Quality (ANZECC/ARMCANZ)
	National Water Quality Management Strategy: Australian Guidelines for Water Quality Monitoring and Reporting (ANZECC/ARMCANZ)
	National Water Quality Management Strategy: Guidelines for Sewerage Systems – Effluent Management (ARMCANZ/ANZECC)
	National Water Quality Management Strategy: Guidelines for Sewerage Systems – Use of Reclaimed Water (ARMCANZ/ANZECC)
	Approved Methods for the Sampling and Analysis of Water Pollutants in NSW (EPA)
	Managing Urban Stormwater: Soils & Construction (Landcom) and associated Volume 2E: Mines and Quarries (DECC)
	Managing Urban Stormwater: Treatment Techniques (EPA)
	Managing Urban Stormwater: Source Control (EPA)
	Technical Guidelines: Bunding & Spill Management (EPA)
	Environmental Guidelines: Use of Effluent by Irrigation (EPA)
	A Rehabilitation Manual for Australian Streams (LWRRDC and CRCCH)
	NSW Guidelines for Controlled Activities (NOW)
Flooding	Floodplain Development Manual (OEH)
	Floodplain Risk Management Guideline (OEH)
Biodiversity	
	NSW Biodiversity Offset Policy for Major Projects (OEH)
	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) Draft Guidelines for Aboriginal Cultural Heritage Assessment and Community Consultation (DP&E) Aboriginal Cultural Heritage Consultation Requirements for Proponents (OEH) Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW (OEH) Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW (OEH) NSW Heritage Manual (OEH) Statements of Heritage Impact (OEH) Hunter Regional Environmental Plan 1989 (Heritage)
Noise	NSW Industrial Noise Policy (EPA) Interim Construction Noise Guideline (EPA) NSW Road Noise Policy (EPA) Rail Infrastructure Noise Guideline (EPA) Voluntary Acquisition and Mitigation Policy for State Significant Mining, Petroleum and Extractive Industry Developments (DP&E) Technical basis for guidelines to minimise annoyance due to blasting overpressure and ground vibration (ANZEC)
Air	Approved Methods and Guidance for the Modelling and Assessment of Air Pollutants in NSW (EPA) Approved Methods for the Sampling and Analysis of Air Pollutants in NSW (EPA) Coal Mine Particulate Matter Control Best Practice – Site Specific Determination Guideline (EPA) Generic Guidance and Optimum Model Settings for the CALPUFF Modelling System for Inclusion in the Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (EPA) National Greenhouse Accounts Factors (Commonwealth) Voluntary Acquisition and Mitigation Policy for State Significant Mining, Petroleum and Extractive Industry Developments (DP&E)
Transport	Guide to Traffic Generating Development (RTA) Road Design Guide (RMS) & relevant Austroads Standards
Public Safety	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
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)

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 Environmental Plan 2009
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Singleton Local Environmental Plan 2013
