Director General's Environmental Assessment Requirements

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

State Significant Development

Application Number	SSD 5602
Development	The Angus Place Mine Extension Project, which includes: • expansion of an existing underground coal mine using longwall mining methods to produce up to 4 million tonnes per annum (Mtpa) of run-of-mine (ROM) coal for up to 25 years; • construction of a new private haul road, ventilation shafts, dewatering bores and associated infrastructure; • transportation of crushed and sized coal to local power stations and the Western Coal Services site by trucks along private haul roads; and • decommissioning all site infrastructure on completion of operations, and rehabilitating the site.
Location	Wolgan Road, Lidsdale
Applicant	Centennial Angus Place Pty Ltd
Date of Issue	6 November 2012
General Requirements	The Environmental Impact Statement (EIS) for the development must meet the form and content requirements in Clauses 6 and 7 of Schedule 2 of the *Environmental Planning and Assessment Regulation 2000.* In addition, the EIS must include: • a detailed description of the development, including: – need for the proposed development; – likely staging of the development - including construction, operational stage/s and rehabilitation; – likely interactions between the development and any approved and proposed mining operations, including detailed assessments of any required modifications to the approvals for these operations; – likely interactions with other approved developments/projects at the site; and – plans of any proposed building works; • consideration of all relevant environmental planning instruments, including identification and justification of any inconsistencies with these instruments; • a risk assessment of the potential environmental impacts of the development, identifying the key issues for further assessment; • a detailed assessment of the key issues specified below, and any other significant issues identified in this risk assessment, which includes: – a description of the existing environment, using sufficient baseline data; – an assessment of the potential impacts of all stages of the development, including any cumulative impacts, taking into consideration relevant guidelines, policies, plans and statutes; and – a description of the measures that would be implemented to avoid, minimise and, if necessary, offset the potential impacts of the development, including proposals for adaptive management and/or contingency plans to manage any significant risks to the environment; and • a consolidated summary of all the proposed environmental management and monitoring measures, highlighting commitments included in the EIS. The EIS must be accompanied by a report from a qualified quantity surveyor providing: • a detailed calculation of the capital investment value (as defined in clause 3 of the *Environmental Planning and Assessment Regulation 2000*) of the proposal,

	including details of all the assumptions and components from which the CIV calculation is derived; • a close estimate of the jobs that will be created by the development during the construction and operational phases of the development; and • certification that the information provided is accurate at the date of preparation.
Key Issues	The EIS must address the following specific issues: • **Subsidence** – including a detailed quantitative and qualitative assessment of the potential conventional and non-conventional subsidence impacts of the development that includes: - the identification of the natural and built features (both surface and sub-surface) within the area that could be affected by subsidence, and an assessment of the respective values of these features; - accurate predictions of the potential subsidence effects and impacts of the development, including a robust sensitivity analysis of these predictions; - a detailed assessment of the potential environmental consequences of these effects and impacts on both the natural and built environment, paying particular attention to those features that are considered to have significant economic, social, cultural or environmental values; and - a detailed description of the measures that would be implemented to avoid, minimise, remediate and/or offset subsidence impacts and environmental consequences (including adaptive management and proposed performance measures); • **Land Resources** – including a detailed assessment of impacts to: - soils and land capability (including erosion and land contamination); - landforms and topography, including cliffs, rock formations, steep slopes, etc; and - land use, including agricultural, forestry, conservation and recreational use; • **Water Resources** – including: - detailed assessment of potential impacts on the quality and quantity of existing surface water and ground water resources in accordance with the NSW Aquifer Interference Policy, including; o impacts on affected licensed water users and basic landholder rights; o impacts on riparian, ecological, geo-morphological and hydrological values of watercourses, including groundwater dependent ecosystems and environmental flows; and o whether the development can operate to achieve a neutral or beneficial effect on water quality in the drinking water catchment, consistent with the provisions of *State Environmental Planning Policy (Sydney Drinking Water Catchment) 2011;* - 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 and transfer infrastructure and water storage structures; and - identification of any licensing requirements, including existing or future Environment Protection Licences (EPLs) or Pollution Reduction Programs (PRPs), and approvals under the *Water Act 1912* and/or *Water Management Act 2000*; - demonstration that water for the construction and operation of the development can be obtained from an appropriately authorised and reliable supply in accordance with the operating rules of any relevant Water Sharing Plan (WSP); - a description of the measures proposed to ensure the development can operate in accordance with the requirements of any relevant WSP or water source embargo; - a detailed description of the proposed water management system (including sewerage), water monitoring regime, beneficial water re-use program and all other proposed measures to mitigate surface water and groundwater impacts; • **Biodiversity** – including: - accurate estimates of direct vegetation impacts, such as clearing and subsidence and indirect impacts such as 'edge effects'; - a detailed assessment of potential impacts of the development on: o Temperate Highland Peat Swamps;

	○ other terrestrial or aquatic threatened species or populations and their habitats, endangered ecological communities and groundwater dependent ecosystems; and ○ regionally significant remnant vegetation, or vegetation corridors; and - measures that would be taken to avoid, reduce or mitigate impacts on biodiversity, particularly Temperate Highland Peat Swamps; - an offset strategy, which is clearly quantified, to ensure that the development maintains or improves the terrestrial and aquatic biodiversity values of the region in the medium to long term; • **Heritage** – including: - an Aboriginal cultural heritage assessment (including both cultural and archaeological significance) which must: ○ demonstrate effective consultation with the Aboriginal community in determining and assessing impacts, and developing and selecting mitigation options and measures; and ○ outline any proposed impact mitigation and management measures (including an evaluation of the effectiveness and reliability of the measures); and - a Historic heritage assessment (including archaeology) which must: ○ include a statement of heritage impact (including significance assessment) for any State significant or locally significant historic heritage items; and, ○ outline any proposed mitigation and management measures (including an evaluation of the effectiveness and reliability of the measures); • **Air Quality** – including a quantitative assessment of potential: - construction and operational impacts, with a particular focus on dust emissions including $PM_{2.5}$ and PM_{10} emissions and dust generation from coal transport; - reasonable and feasible mitigation measures to minimise dust emissions, including evidence that there are no such other available measures; and - monitoring and best practice management measures, in particular real-time air quality monitoring; • **Greenhouse Gases** – including: - a quantitative assessment of potential Scope 1, 2 and 3 greenhouse gas emissions; - a qualitative assessment of the potential impacts of these emissions on the environment; and - an assessment of reasonable and feasible measures to minimise greenhouse gas emissions and ensure energy efficiency; • **Noise** – including a quantitative assessment of potential: - construction, operational and off-site transport noise impacts; - reasonable and feasible mitigation measures, including evidence that there are no such other available measures; and - monitoring and management measures, in particular real-time and attended noise monitoring; • **Traffic & Transport** – including: - an assessment of potential traffic impacts on the capacity, efficiency and safety of the road network; and - a description of the measures that would be implemented to maintain and/or improve the capacity, efficiency and safety of the road network in the surrounding area over the life of the development; • **Visual** – including: - a detailed assessment of the potential visual impacts of the development on private landowners in the surrounding area as well as from key vantage points in the public domain, in particular, those available to recreational users from State forests, State conservation areas and national parks; and - a detailed description of the measures that would be implemented to minimise the visual impacts of the development; • **Waste** – including: - accurate estimates of the quantity and nature of the potential waste streams of the development; and - a description of measures that would be implemented to minimise production of other waste, and ensure that that waste is appropriately

	managed; • **Hazards –** paying particular attention to public safety, including bushfires; • **Social & Economic** – including an assessment of the: - potential direct and indirect economic benefits of the development for local and regional communities and the State; - potential impacts on local and regional communities, including: o any increased demand for local and regional infrastructure and services (such as housing, childcare, health, education and emergency services); and o impacts on social amenity, particularly impacts on local residents of and other nearby landowners and residents; - a detailed description of the measures that would be implemented to minimise the adverse social and economic impacts of the development, including any infrastructure improvements or contributions and/or voluntary planning agreement or similar mechanism; and - a detailed assessment of the costs and benefits of the development as a whole, and whether it would result in a net benefit for the NSW community; and • **Rehabilitation** – including the proposed rehabilitation strategy for the site, having regard to the key principles in *Strategic Framework for Mine Closure*, including: - rehabilitation objectives, methodology, monitoring programs, performance standards and proposed completion criteria; - nominated final land use, having regard to any relevant strategic land use planning or resource management plans or policies; - a conceptual final landform design, including a detailed figure depicting relevant site features; and - the potential for integrating this strategy with any other rehabilitation and/or offset strategies in the region.
Plans and Documents	The EIS must include all relevant plans, architectural drawings, diagrams and relevant documentation required under Schedule 1 of the *Environmental Planning and Assessment Regulation 2000*. These documents should be included as part of the EIS rather than as separate documents.
Consultation	During the preparation of the EIS, you must consult with relevant local, State and Commonwealth Government authorities, service providers, community groups and affected landowners. In particular you must consult with the: • Commonwealth Department of Sustainability, Environment, Water, Population and Communities; • Office of Environment and Heritage (including the Heritage Branch); • Environment Protection Authority; • Division of Resources and Energy within the Department of Trade and Investment, Regional Infrastructure and Services; • Department of Primary Industries (including the NSW Office of Water, Forestry NSW, NSW Agriculture, Fisheries NSW, and Catchments and Lands (Crown Lands Division)); • Transport for NSW (including the Centre for Transport Planning, and Roads and Maritime Services); • NSW Health; • Sydney Catchment Authority; • Hawkesbury-Nepean Catchment Management Authority; • Lithgow City Council; • Delta Electricity; and • relevant Aboriginal stakeholders. The EIS must describe the consultation process and the issues raised, and identify where the design of the development has been amended in response to these issues. Where amendments have not been made to address an issue, justification should be provided.
Further	If you do not lodge a DA and EIS for the development within 2 years of the issue

consultation after 2 years	date of these DGRs, you must consult further with the Director-General in relation to the lodgement requirements.
References	The assessment of the key issues listed above must take into account relevant guidelines, policies, and plans as identified. While not exhaustive, Attachment 1 contains a list of some of the guidelines, policies, and plans that may be relevant to the environmental assessment of this development.

ATTACHMENT 1
Technical and Policy Guidelines

The following guidelines may assist in the preparation of the Environmental Impact Statement. This list is not exhaustive and not all of these guidelines may be relevant to your proposal.

Many of these documents can be found on the following websites:
http://www.planning.nsw.gov.au
http://www.bookshop.nsw.gov.au
http://www.publications.gov.au

Policies, Guidelines & Plans

Risk Assessment	
	AS/NZS 4360:2004 Risk Management (Standards Australia)
	HB 203: 203:2006 Environmental Risk Management – Principles & Process (Standards Australia)
Biodiversity	
	Threatened Species Survey and Assessment Guidelines: Field Survey Methods for Fauna – Amphibians (DECCW 2009)
	Threatened Biodiversity Survey and Assessment: Guidelines for Developments and Activities – Working Draft (DECC 2004)
	BioBanking Assessment Methodology and Credit Calculator Operational Manual (DECCW 2008)
	The Threatened Species Assessment Guideline – The Assessment of Significance (DECC 2007)
	NSW State Groundwater Dependent Ecosystem Policy (DLWC)
	Policy & Guidelines - Aquatic Habitat Management and Fish Conservation (NSW Fisheries)
	Principles for the Use of Biodiversity Offsets in NSW (OEH)
	State Environmental Planning Policy No. 44 – Koala Habitat Protection
Water Resources	
Surface Water	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)
	Using the ANZECC Guideline and Water Quality Objectives in NSW (DEC)
	State Water Management Outcomes Plan
	Water Sharing Plan for the Greater Metropolitan Region Unregulated River Water Sources 2011
	NSW Government Water Quality and River Flow Objectives (OEH)
	Approved Methods for the Sampling and Analysis of Water Pollutants in NSW (DEC)
	Managing Urban Stormwater: Soils & Construction (Landcom) and associated Volume 2E: Mines and Quarries.
	Managing Urban Stormwater: Treatment Techniques (DECC)
	Managing Urban Stormwater: Source Control (DECC)
	Floodplain Development Manual (DIPNR)
	Floodplain Risk Management Guideline (DECC)
	A Rehabilitation Manual for Australian Streams (LWRRDC and CRCCH)
	Technical Guidelines: Bunding & Spill Management (DECC)
	Environmental Guidelines: Use of Effluent by Irrigation (DECC)
	Office of Water Guidelines for Controlled Activities (2012)

	State Environmental Planning Policy (Sydney Drinking Water Catchment) 2011
Groundwater	National Water Quality Management Strategy Guidelines for Groundwater Protection in Australia (ARMCANZ/ANZECC)
	NSW State Groundwater Policy Framework Document (DLWC, 1997)
	NSW State Groundwater Quality Protection Policy (DLWC, 1998)
	NSW State Groundwater Quantity Management Policy (DLWC, 1998)
	Murray-Darling Basin Groundwater Quality. Sampling Guidelines. Technical Report No 3 (MDBC)
	Murray-Darling Basin Commission. Groundwater Flow Modelling Guideline (Aquaterra Consulting Pty Ltd)
	Guidelines for the Assessment & Management of Groundwater Contamination (DECC, 2007)
	Any relevant Water Sharing Plan for groundwater and surface water resources
	NSW Aquifer Interference Policy 2012 (NOW)
Air Quality	
	Protection of the Environment Operations (Clean Air) Regulation 2002
	The Assessment and Management of Odour from Stationary Sources in NSW: Technical Framework and Notes (OEH)
	Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (DEC)
	Approved Methods for the Sampling and Analysis of Air Pollutants in NSW (DEC)
Noise & Blasting	
	NSW Industrial Noise Policy (DECC)
	Environmental Noise Management – Assessing Vibration: a technical guide (DEC)
	NSW Road Noise Policy (DECCW)
	Technical basis for guidelines to minimise annoyance due to blasting overpressure and ground vibration (ANZECC)
Land Resources	
	Draft Agricultural Impact Assessment Guidelines 2011 (DP&I)
	Agfact AC25: Agricultural Land Classification (NSW Agriculture)
	State Environmental Planning Policy No. 55 – Remediation of Land
	Australian and New Zealand Guidelines for the Assessment and Management of Contaminated Sites (ANZECC)
Traffic & Transport	
	Guide to Traffic Generating Development (RTA)
	Road Design Guide (RTA)
Heritage	
Aboriginal	Draft Guidelines for Aboriginal Cultural Heritage Assessment and Community Consultation (DEC 2005)
	The Burra Charter (The Australia ICOMOS charter for places of cultural significance)
Historic	NSW Heritage Manual (NSW Heritage Office)
	The Burra Charter (The Australia ICOMOS charter for places of cultural significance)
Greenhouse Gases	
	National Greenhouse Accounts Factors (Australian Department of Climate Change (DCC))
	Guidelines for Energy Savings Action Plans (DEUS)
Waste	
	Waste Classification Guidelines (DECC)
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

Rehabilitation	
	Mine Rehabilitation – Leading Practice Sustainable Development Program for the Mining Industry (Commonwealth of Australia)
	Mine Closure and Completion – Leading Practice Sustainable Development Program for the Mining Industry (Commonwealth of Australia)
	Strategic Framework for Mine Closure (ANZMEC-MCA)
Socio-Economic	
	Draft Economic Evaluation in Environmental Impact Assessment (DoP)
	Techniques for Effective Social Impact Assessment: A Practical Guide (Office of Social Policy, NSW Government Social Policy Directorate)