

Director-General's Environmental Assessment Requirements

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

State Significant Development

Application Number	SSD 6300
Proposal	The Rix's Creek Extension Project, which includes: • extending open cut mining operations northwards of Pit 3 to recover an additional 32 million tonnes (Mt) of saleable coal over a period of 21 years; • increasing the extraction rate of run-of-mine (ROM) coal from 2.5 Mt a year to 4.5 Mt a year; • extending the western boundary of the existing mining lease to accommodate the proposed out of pit overburden dump; • increasing the hours of operation of the coal handling and processing plant (CHPP) from 4.5 days a week to 7 days a week; • transporting up to 2.7 Mt of saleable coal a year via rail; • continued use of existing tailings emplacements; • construction and use of a second New England Highway underpass; and • progressive rehabilitation of the site.
Location	5 km northwest of Singleton
Applicant	Bloomfield Collieries Pty Ltd
Date of Issue	3 March 2014
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 <i>Environmental Planning and Assessment Regulation 2000</i>. In addition, the EIS must include a: • detailed description of the development, including: – need for the proposed development that describes the key benefits of the development at the local, regional and State level; – justification for the proposed mine plan, including alternatives considered, efficiency of resource recovery, and environmental considerations; and – likely staging of the development - including construction, operational stage/s and rehabilitation; • consideration of all relevant environmental planning instruments (including Part 3 of the <i>State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007</i>, and identification and justification of any inconsistencies with these instruments; • detailed assessment of the key issues specified below, and any other significant issues including: – 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 and policies; 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 • 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 <i>Environmental Planning and Assessment Regulation 2000</i>) of the proposal, including details of all the assumptions and components from which the capital investment value calculation is derived; • a close estimate of the jobs that would be created 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 matters: • Air Quality – including a detailed quantitative assessment of potential: - construction and operational impacts (including cumulative impacts) on all potential receivers, with a particular focus on dust emissions (including PM₁₀ and PM_{2.5} emissions, and dust generation from coal transport), as well as diesel and blast fume emissions and odour emissions (from the spreading of biosolids); - mitigation measures to minimise dust, diesel, blast fume and odour emissions, including evidence that demonstrates the measures are consistent with best practice, and there are no such measures available other than those proposed; and - monitoring and management measures, in particular real-time air quality monitoring and adaptive management protocols; • Noise, Vibration & Blasting – including a detailed quantitative assessment of potential: - construction, operational and off-site road/rail noise impacts (including cumulative impacts); - blasting impacts on nearby infrastructure and other mines; - blasting impacts on people, livestock and property; - mitigation measures, including evidence that demonstrates the measures are consistent with best practice, and that there are no such measures available other than those proposed; and - monitoring and management measures, in particular real-time, attended noise monitoring, and predictive meteorological forecasting; • Biodiversity – including: - measures taken to avoid, reduce or mitigate impacts on biodiversity; - identification of existing vegetation within disturbance areas, and the ecological values of this habitat; - accurate estimates of proposed vegetation clearing; - a detailed assessment of potential impacts of the development on any: - o terrestrial or aquatic threatened species or populations and their habitats, endangered ecological communities and groundwater dependent ecosystems; and - o remnant vegetation, habitat corridors, and existing biodiversity offset areas; and - a comprehensive offset strategy for the development including a justification of how the strategy would maintain or improve the biodiversity values of the region in the medium to long term. The obligation for a comprehensive biodiversity offset strategy may be met by contributing to the Upper Hunter Offsets Fund to be established under the Upper Hunter Strategic Assessment Framework. If this is proposed the EIS must include: - an assessment of impacts on NSW threatened species under the <i>Threatened Species Conservation Act 1995</i> (TSC Act) and matters of national environmental significance under the <i>Environment Protection and Biodiversity Conservation Act 2000</i> (EPBC Act), and - use of the Biodiversity Certification Assessment Methodology (BCAM) and be consistent with the <i>draft Biodiversity Plan</i> for the Upper Hunter Strategic Assessment.

	• Land Resources – including an Agricultural Impact Statement and a detailed description of the potential impacts on: - soils and land capability (including salinity and contamination, as well as a summary of the information used to obtain a site verification certificate); - landforms and topography (including steep slopes); and - other land uses within the vicinity of the mine, (including agricultural, forestry, conservation and recreational use); • Water Resources – including: - detailed assessment of potential impacts (including cumulative impacts) on the quality and quantity of existing surface and ground water resources, including: - o detailed modelling of potential groundwater impacts, including any potential impacts on alluvial aquifers; - o impacts on affected licensed water users and basic landholder rights; - o impacts on riparian, ecological, geo-morphological and hydrological values of watercourses, including environmental flows; and - o a flood assessment including identification of any necessary flood impact mitigation measures; - a detailed site water balance, including a description of site water demands, water disposal methods (inclusive of volume, salinity and frequency of any water discharges), water supply infrastructure and water storage structures; - an assessment of proposed water discharge quantities and quality against receiving water quality and flow objectives; - assessment of impacts of salinity from mining operations, including disposal and management of coal rejects and modified hydrogeology, a salinity budget and the evaluation of salt migration to surface and groundwater sources; - an assessment of groundwater impacts against the minimal impact considerations in the <i>NSW Aquifer Interference Policy</i>; - identification of any licensing requirements or other approvals under the <i>Water Act 1912</i> and/or <i>Water Management Act 2000</i>; - 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 sewage), water monitoring program and measures to mitigate surface and groundwater impacts; and - compliance with the Hunter River Salinity Trading Scheme (as required); • Heritage – including: - an Aboriginal cultural heritage assessment (including both cultural and archaeological significance) which must: - o demonstrate effective consultation with Aboriginal communities in determining and assessing impacts, and developing and selecting mitigation options and measures; and - o 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: - o include a statement of heritage impact (including significance assessment) for any State significant or locally significant heritage items; and - o outline any proposed mitigation and management measures (including an evaluation of the effectiveness and reliability of the measures);
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	• Traffic & Transport – including: - accurate predictions of the road and rail traffic generated by the development (including a detailed comparison of existing and proposed traffic movements); - a detailed assessment of the potential impacts of the development on the capacity, efficiency and safety of the: - o local and regional rail network, having regard to the cumulative impacts on the passenger and freight rail network; and - o local and classified road network, with particular regard to a cumulative traffic impacts; - details of mine to port transport movements, including: - o train path availability and any required rail infrastructure works on the Main Northern Railway; - o details of the arrangement with Integra Mine for the use of its rail loop; and - o the likelihood for continued use of Integra Mine's rail loop, and for the development of the approved Rix's Creek rail loop; - details of the proposed New England Highway underpass, including: - o a concept design plan; - o a justification for its proposed development; and - o details of how the underpass would be managed to ensure there would be no impacts on the New England Highway; and - a detailed description of the measures that would be implemented to maintain and/or improve the capacity, efficiency and safety of the road and rail networks in the surrounding area over the life of the development, including consideration of road maintenance contributions to Singleton Shire Council; • Visual – including: - a detailed assessment of the: - o changing landforms on the site during the various stages of the development; and - o potential visual impacts of the development on private landowners in the surrounding area as well as key vantage points in the public domain, including photomontages and lighting impacts; 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, including tailings and coarse reject; - a coarse reject disposal strategy; - a tailings disposal strategy, including a tailings balance and details of proposed disposal methods; and - a description of measures that would be implemented to minimise production of other waste, and ensure that that waste is appropriately managed; • 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; • 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 increased demand for local and regional infrastructure and services; - 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 mechanisms; and
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	- 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; • Hazards – including bushfires and public safety; • Rehabilitation – including the proposed rehabilitation strategy for the site (assuming closure of the mine upon completion of the proposed development), having regard to the key principles in the <i>Strategic Framework for Mine Closure</i>, including: - rehabilitation objectives, methodology, monitoring programs, performance standards and proposed completion criteria; - nominated final land uses and land forms (including cross sections), having regard to any relevant strategic land use planning or resource management plans or policies; - justification for inclusion and proposed location of a final void, and consideration of alternatives; and - the potential for integrating this strategy with adjacent mines.
Plans and Documents	The EIS must include all relevant plans, architectural drawings, diagrams and relevant documentation required under Schedule 1 of the <i>Environmental Planning and Assessment Regulation 2000</i> . 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 or Commonwealth Government authorities, 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 Authority; • 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; and • Singleton Shire Council. 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, a short explanation should be provided.
Further consultation after 2 years	If you do not lodge a DA and an EIS for the development within 2 years of the issue date of these DGRs, you must consult further with the Director-General in relation to the requirements for lodgement.
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)
	Risk Management Handbook for the Mining Industry (DPI)
	Risk Management Policy Framework for Dam Safety (Dam Safety Committee)
Biodiversity	
	Principles for the Use of Biodiversity Offsets in NSW (OEH 2013)
	Interim policy on assessing and offsetting biodiversity impacts of Part 3A, State significant development and State significant infrastructure projects (OEH 2011)
	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)
	Threatened Species Assessment Guidelines: the Assessment of Significance (DECC 2007)
	Guidelines for Threatened Species Assessment (DoP 2005)
	BioBanking Assessment Methodology and Credit Calculator Operational Manual (DECCW 2008)
	NSW State Groundwater Dependent Ecosystem Policy (DLWC)
	Policy & Guidelines - Aquatic Habitat Management and Fish Conservation (NSW Fisheries)
	Environmental Offsets Policy (SEWPac 2012)
	Upper Hunter Strategic Assessment – Interim Policy (DP&I 2012)
Water Resources	
	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)
Surface Water	Using the ANZECC Guideline and Water Quality Objectives in NSW (DEC)
	State Water Management Outcomes Plan
	Water Sharing Plan for the Hunter Unregulated and Alluvial Water Sources 2009
	NSW Government Water Quality and River Flow Objectives (DECC)
	Hunter River Salinity Trading Scheme (EPA)
	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)
	NSW Guidelines for Controlled Activities (2012)
	Water Sharing Plan for the Hunter Unregulated and Alluvial Water Sources 2009
	Water Sharing Plan for the Hunter Regulated River Water Source 2003
<i>Groundwater</i>	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)
	NSW Aquifer Interference Policy 2012 (NOW)
	Water Sharing Plan for the Hunter Unregulated and Alluvial Water Sources 2009
	Water Sharing Plan for the Hunter Regulated River Water Source 2003
Air Quality	
	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 (EPA 2000)
	Environmental Noise Management Manual (RTA) Dec 2001
	Environmental Noise Management – Assessing Vibration: A Technical Guide (DEC)
	NSW Road Noise Policy (EPA 2011)
	Rail Noise Infrastructure Guidelines (EPA 2013)
	Technical basis for guidelines to minimise annoyance due to blasting overpressure and ground vibration (ANZECC)
Land Resources	
	Interim protocol for site verification and mapping of biophysical strategic agricultural land (OEH 2013)
	Agricultural Impact Statement Guidelines 2012 (DP&I)
	Agfact AC25: Agricultural Land Classification (NSW Agriculture)
	Australian and New Zealand Guidelines for the Assessment and Management of Contaminated Sites (ANZECC)
	State Environmental Planning Policy No. 55 – remediation of land
Traffic & Transport	
	Guide to Traffic Generating Development (RTA)
	Road Design Guide (RTA)
Heritage	
<i>Aboriginal</i>	Draft Guidelines for Aboriginal Cultural Heritage Assessment and Community Consultation (DEC 2005)
	The Burra Charter (The Australia ICOMOS charter for places of cultural significance)
	Aboriginal Cultural Heritage Consultation Requirements for Proponents (DECCW 2010)
<i>Historic</i>	NSW Heritage Manual (NSW Heritage Office)

	<u>The Burra Charter (The Australia ICOMOS charter for places of cultural significance)</u>
	<u>Statements of Heritage Impact (NSW Heritage Office)</u>
	<u>NSW Heritage Manual: Assessing Heritage Significance (NSW Heritage Office) 2001</u>
Greenhouse Gases	
	<u>National Greenhouse Accounts Factors (Australian Department of Climate Change (DCC))</u>
	<u>Guidelines for Energy Savings Action Plans (DEUS)</u>
Waste	
	<u>Waste Classification Guidelines (DECC)</u>
Hazards	
	<u>State Environmental Planning Policy No. 33 – Hazardous and Offensive Development</u>
	<u>Hazardous and Offensive Development Application Guidelines - Applying SEPP 33</u>
	<u>Hazardous Industry Planning Advisory Paper No. 6 – Guidelines for Hazard Analysis</u>
Rehabilitation	
	<u>Mine Rehabilitation – Leading Practice Sustainable Development Program for the Mining Industry (Commonwealth of Australia)</u>
	<u>Mine Closure and Completion – Leading Practice Sustainable Development Program for the Mining Industry (Commonwealth of Australia)</u>
	<u>Strategic Framework for Mine Closure (ANZMEC-MCA)</u>
Socio-Economic	
	<u>Draft Economic Evaluation in Environmental Impact Assessment (DoP)</u>
	<u>Techniques for Effective Social Impact Assessment: A Practical Guide (Office of Social Policy, NSW Government Social Policy Directorate)</u>
	<u>Singleton Council Community Strategic Plan - Our Place: A Blueprint for 2022 (Singleton Council 2012)</u>