

Director-General's Requirements

Section 75F of the *Environmental Planning and Assessment Act 1979*

Application Number	07_0160
Project	<p>The Wallarah Coal Project, which includes:</p> <ul style="list-style-type: none"> • extracting up to 5 million tonnes of coal a year from underground workings for a period of up to 28 years using longwall mining methods; • constructing and operating a range of associated infrastructure including a rail spur, coal stockpiles, ventilation shafts, and a gas drainage system; • transporting coal from the mine by rail; and • rehabilitating the site.
Site	Approximately 5km northwest of Wyong
Proponent	Wyong Areas Coal Joint Venture
Date of Issue	10 August 2009
General Requirements	<p>The environmental assessment of the project must include</p> <ul style="list-style-type: none"> • an executive summary; • a detailed description of the project, including the: <ul style="list-style-type: none"> – need for the project; – alternatives considered, including detailed justification for the proposed mine plan/s; – likely staging of the project; – plans of any proposed building works; • a comprehensive risk assessment of the potential environmental impacts of the project, identifying the key issues for further assessment; • a detailed assessment of the key issues specified below, and any other significant issues identified in the risk assessment of the project (see above), which includes: <ul style="list-style-type: none"> – a description of the existing environment and its values, using sufficient baseline data; – an assessment of the potential impacts of all stages of the project on this environment, including any cumulative impacts, taking into consideration any relevant guidelines, policies, plans, and statutory provisions (see below), as well as the recommendations of the strategic inquiry into the <i>Impacts of Potential Underground Coal Mining in the Wyong Local Government Area</i>; – a description of the measures that would be implemented to avoid, minimise and, if necessary, offset the potential impacts of the project, and ensure that the project is in the public interest and meets the net benefit test; – a description of the measures that would be implemented to manage and monitor the potential impacts of the project, paying particular attention to emerging best practice within the mining industry in the field of adaptive management; • a statement of commitments; • a conclusion justifying the project, taking into consideration: the suitability of the site; the economic, social and environmental impacts of the project as a whole; and whether it is consistent with the objects of the <i>Environmental Planning & Assessment Act 1979</i>, including the principles of ecological sustainable development; and • a signed statement from the author of the environmental assessment certifying that the information contained within the report is neither false nor misleading.

<p>Key Issues</p>	<ul style="list-style-type: none"> • Subsidence – including a detailed quantitative and qualitative assessment of the potential conventional and non-conventional subsidence impacts of the project that includes: <ul style="list-style-type: none"> - the identification of the natural and built features (both surface and sub-surface) within the area that could be affected by the subsidence associated with the proposed mining operations, and an assessment of the respective values of these features using any relevant statutory or policy documents; - accurate predictions of the potential subsidence effects and impacts of the project, 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 or environmental values; and - a detailed description of the measures that would be implemented to avoid, minimise, remediate and/or offset the subsidence impacts of the project, paying particular attention to the proposed adaptive management strategy, and dealing with any uncertainties or potentially significant risks associated with the project; • Soil and Water – including: <ul style="list-style-type: none"> - detailed modelling of potential surface and groundwater impacts of the project; - a detailed water balance for the project, including a description of the measures that would be implemented to minimise water use on site; - a detailed assessment of the potential impacts of the project on: <ul style="list-style-type: none"> ○ the quantity and quality of regional water supplies, and in particular the supply of water to the Gosford-Wyong Water Supply Scheme; ○ regional water supply infrastructure; ○ water users, both within and downstream of the project area, including detailed consideration of applicable water sharing plans; ○ the riparian and ecological values of the watercourses within the project area, and in particular any significant groundwater dependent ecosystems; and ○ environmental flows; - a detailed description of the proposed water management system on site, outlining the proposed erosion and sediment control measures, stormwater management measures, and wastewater management measures; - a detailed assessment of the potential regional and local flooding impacts of the project, with a particular emphasis on public safety, using suitably robust assumptions that take into account the potential impacts of climate change, and are consistent with DECC's most recent guidance on this matter; • Biodiversity – including: <ul style="list-style-type: none"> - a detailed assessment of the impacts of the project on: <ul style="list-style-type: none"> ○ threatened species, populations or ecological communities (including the following EPBC threatened species: <i>Angophora inopina</i>, <i>Cryptostylis hunteriana</i>, <i>Mixophyes iterates</i> – the Giant Barred Frog, <i>Mixophyes balbus</i> – the Stuttering Frog, <i>Litoria littlejohni</i> – the Littlejohn's tree Frog); ○ CAMBA, JAMBA, and ROKAMBA migratory bird species; ○ critical habitats; and ○ regionally significant remnant vegetation, or vegetation corridors, <p>having regard to the NSW Scientific Committee's determination</p>
--------------------------	---

- that 'longwall mining is a key "threatening process";
- include an offset strategy to ensure the project maintains or improves the biodiversity values of the region in the medium to long term (in accordance with NSW and Federal policies);
- **Noise and Vibration** – including quantitative assessments of the potential construction, operation, and off-site road and rail noise impacts of the project on existing and proposed development in the vicinity of the site, including the proposed Warnervale Town Centre and the Wyong Employment Zone;
- **Air** – including a quantitative assessment of the potential air quality impacts of the project, that explicitly includes consideration of both potential PM₁₀, PM_{2.5} and silica emissions of the project;
- **Greenhouse Gas** – including:
 - a quantitative assessment of the potential scope 1, 2 and 3 greenhouse gas emissions of the project, including fugitive emissions;
 - a qualitative assessment of the potential impacts of these emissions on the environment; and
 - an assessment of all reasonable and feasible measures that could be implemented to minimise the generation of greenhouse gas emissions associated with the project;
- **Transport** – including a detailed assessment of the project on the capacity, safety and efficiency of the:
 - surrounding rail network, having regard to the strategic objectives for passenger and freight rail network (such as the Northern Sydney Freight Rail Corridor project); and
 - surrounding road network, with particular regard to the Wallarah interchange (F3 Freeway and Sparks Road), Motorway Link Road / Tooheys Road intersection and the Sparks Road / Hue Hue Road intersection;
- **Heritage** - both Aboriginal and non-Aboriginal, including Aboriginal rock art sites;
- **Visual** – including:
 - an assessment of the potential visual impacts of the proposed surface facilities of the projects on the amenity of the surrounding area, and particularly the proposed Warnervale Town Centre, Wyong Employment Zone, and the major elements of the public domain linking these two areas;
 - a detailed description of the measures that would be implemented to minimise the potential visual impacts of the project, including the proposed landscaping to screen the surface facilities and stockpiles, and the proposed measures to minimise the lighting and signage impacts of the surface facilities;
- **Health Risk** – including a detailed Human Health Risk Assessment addressing how the project's environmental impacts (particularly in relation to air quality, noise and drinking water quality) may impact the health of the local community. The assessment should include both impacts directly created by the project and the impacts indirectly created by the project such as additional rail and road movements in the local area;
- **Hazards** – paying particular attention to public safety;
- **Waste** – including:
 - accurate estimates of the quantity, and nature, of the potential waste streams of the project; and
 - a detailed description of the measures that would be implemented to minimise, reuse, recycle and dispose of any waste produced on site;
- **Rehabilitation** – including a detailed description of the proposed rehabilitation strategy, having regard to the key principles in the strategic framework for mine closure (see relevant guidelines below) and any relevant strategic land use planning plans or policies; and

	<ul style="list-style-type: none"> • Socio-economic – including a comprehensive assessment of the potential economic and social impacts and benefits of the project that demonstrates that the project as a whole would result in a net benefit to the community, having particular regard to the strategic objectives for the region outlined in relevant policy documents such as the <i>State Plan</i> and <i>Central Coast Regional Strategy</i>, and including consideration of the economic implications of the Commonwealth's proposed Carbon Pollution Reduction Scheme.
References	The environmental assessment of the project must take into account relevant State Government guidelines, policies and plans. While not exhaustive, the following attachment contains a list of some guidelines, policies and plans that may be relevant to the environmental assessment of this project on the existing and proposed development in the vicinity of the site.
Consultation	<p>During the preparation of the environmental assessment, you should consult with the relevant local, State or Commonwealth government authorities as well as service providers, community groups and affected landowners.</p> <p>In particular, you must consult with:</p> <ul style="list-style-type: none"> • Commonwealth Department of Environment, Water, Heritage and the Arts; • Department of Environment, Climate Change and Water; • Department of Industry & Investment; • Department of Transport & Infrastructure; • Department of Services, Technology & Administration; • Wyong Shire Council; • Gosford-Wyong Councils' Water Authority; and • Infrastructure service providers (in the subsidence area). <p>Both the consultation process, and the issues raised during this consultation process, must be described in the environmental assessment.</p>
Deemed refusal period	120 days

Policies, Guidelines & Plans

Aspect	Policy /Methodology
Risk	AS/NZS 4360:2004 Risk Management (Standards Australia) HB 203: 203:2006 Environmental Risk Management – Principles & Process (Standards Australia)
Subsidence	Guideline for Application for Subsidence Management Approvals (DPI)
Soil and Water	
Soil	Rural Land Capability Mapping (DWE)
	Agricultural Land Classification (DPI)
	Australian and New Zealand Guidelines for the Assessment and Management of Contaminated Sites (ANZECC & NHMRC)
	National Environment Protection (Assessment of Site Contamination) Measure 1999 (NEPC)
	State Environmental Planning Policy No. 55 – Remediation of Land
	Managing Land Contamination – Planning Guidelines SEPP 55 – Remediation of Land (DOP)
	NSW Salinity Strategy (DECC)
Surface Water	National Water Quality Management Strategy: Water quality management - an outline of the policies (ANZECC/ARMCANZ)
	National Water Quality Management Strategy: Policies and principles - a reference document (ANZECC/ARMCANZ)
	National Water Quality Management Strategy: Implementation guidelines (ANZECC/ARMCANZ)
	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)
	Using the ANZECC Guideline & Water Quality Objectives in NSW (DECC)
	Relevant Water Sharing Plans for the Central Coast Water Management Area
	NSW Government Water Quality and River Flow Environmental Objectives (DECC)
	Approved Methods for the Sampling and Analysis of Water Pollutants in NSW (DECC)
	Managing Urban Stormwater: Soils & Construction (Landcom)
	Managing Urban Stormwater: Treatment Techniques (DECC)
	Managing Urban Stormwater: Source Control (DECC)
	Floodplain Management Manual (DWE)
	Floodplain Risk Management Guideline (DECC)
	The NSW State Rivers and Estuaries Policy (NSW Water Resources Council)
	The NSW Wetlands Management Policy (DECC)
	A Rehabilitation Manual for Australian Streams (LWRRDC and CRCCH)
	Technical Guidelines: Bunding & Spill Management (DECC)
	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)
	Environmental Guidelines: Use of Effluent by Irrigation (DECC)

Aspect	Policy /Methodology
<i>Groundwater</i>	National Water Quality Management Strategy Guidelines for Groundwater Protection in Australia (ARMCANZ/ANZECC)
	NSW State Groundwater Policy Framework Document (DWE)
	NSW State Groundwater Quality Protection Policy (DWE)
	NSW State Groundwater Quantity Management Policy (DWE) Draft
	Murray-Darling Basin Groundwater Quality. Sampling Guidelines. Technical Report No 3 (MDBC)
	Murray-Darling Basin Commission. Groundwater Flow Modelling Guideline (Aquaterra Consulting Pty Ltd)
Biodiversity	
	Draft Guidelines for Threatened Species Assessment under Part 3A of the <i>Environmental Planning and Assessment Act 1979</i> (DECC)
	Threatened Biodiversity Survey and Assessment: Guidelines for Developments and Activities. Working Draft (DECC)
	NSW Groundwater Dependent Ecosystem Policy (DWE)
	Policy & Guidelines - Aquatic Habitat Management and Fish Conservation (DPI)
	Policy & Guidelines - Fish Friendly Waterway Crossings (DPI)
	State Environmental Planning Policy No. 14 – Coastal Westlands
	State Environmental Planning Policy No. 44 – Koala Habitat Protection
Noise & Vibration	
	NSW Industrial Noise Policy (DECC)
	Environmental Criteria for Road Traffic Noise (DECC)
	Interim Construction Noise Guideline (DECC)
	Interim Guideline for the Assessment of Noise from Rail Infrastructure Projects (DECC)
	Assessing Vibration: A Technical Guideline (DECC)
Air Quality	
	Protection of the Environment Operations (Clean Air) Regulation 2002
	Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (DECC)
	Approved Methods for the Sampling and Analysis of Air Pollutants in NSW (DECC)
Greenhouse Gas	
	National Greenhouse Accounts (NGA) Factors (AGO)
	Guidelines for Energy Savings Action Plans (DWE)
Transport	
	Guide to Traffic Generating Development (RTA)
	Road Design Guide (RTA)
Heritage	
<i>Aboriginal</i>	Draft Guidelines for Aboriginal Cultural Heritage Impact Assessment and Community Consultation (DECC)
	Aboriginal Cultural Heritage Standards and Guidelines Kit (NSW EPA)
<i>Non- Aboriginal</i>	NSW Heritage Manual (NSW Heritage Office)
	The Burra Charter (The Australia ICOMOS charter for places of cultural significance)
Waste	
	Waste Avoidance and Resource Recovery Strategy 2007 (DECC)
	Environmental Guidelines: Solid Waste Landfills (DECC)
	Waste Classification Guidelines (DECC)
Health Risk	
	Guidelines for Assessing Human Health Risks from Environmental Hazards 2002 (DoH)

Aspect	Policy /Methodology
Hazards	<p>State Environmental Planning Policy No. 33 – Hazardous and Offensive Development</p> <p>Applying SEPP 33 – Hazardous and Offensive Development Application Guidelines (DOP)</p> <p>Hazardous Industry Planning Advisory Paper No. 6 – Guidelines for Hazard Analysis (DOP)</p>
Rehabilitation	<p>Strategic Framework for Mine Closure (ANZMEC/MCA)</p> <p>Mine Rehabilitation – Leading Practice Sustainable Development Program for the Mining Industry (Commonwealth of Australia)</p> <p>Mine Closure and Completion – Leading Practice Sustainable Development Program for the Mining Industry (Commonwealth of Australia)</p>
Social & Economic	<p>Draft Economic Evaluation in Environmental Impact Assessment (DOP)</p> <p>Techniques for Effective Social Impact Assessment: A Practical Guide (Office of Social Policy, NSW Government Social Policy Directorate)</p>
Strategic Plans	<p>Central Coast Regional Strategy (DOP)</p>