



# MOOLARBEN COAL PROJECT

*S t a g e 2*

## *A P P E N D I X 1 B*

*Director General's  
Environmental Assessment Requirements  
Stage 2 Project*





NSW GOVERNMENT  
**Department of Planning**

Major Development Assessment  
Mining & Extractive Industries  
Contact: Nicholas Hall  
Phone: (02) 9228 6438  
Fax: (02) 9228 6466  
Email: [nicholas\\_hall@planning.nsw.gov.au](mailto:nicholas_hall@planning.nsw.gov.au)  
Level 4 Western Gallery  
23-33 Bridge Street  
GPO Box 39  
SYDNEY NSW 2001

Mr I Callow  
Project Manager  
Moolarben Coal Mines Pty Ltd  
PO BOX 1320  
North Sydney NSW 2059

Our Ref: S04/01440

Dear Mr Callow

**Director-General's Requirements  
Moolarben Coal Project - Stage Two  
Application Number MP 08\_0135**

The Department has received your application for Stage 2 of the Moolarben Coal Project.

I have attached a copy of the Director-General's requirements for the project. These requirements have been prepared in consultation with the relevant agencies, and are based on the information you have provided to date. I have also attached a copy of the agencies' comments for your information.

Please note that the Director-General may alter these requirements at any time.

If your proposal is likely to have a significant impact on matters of National Environmental Significance, it will require an approval under the Commonwealth *Environment Protection Biodiversity Conservation Act 1999* (EPBC Act). This approval is in addition to any approvals required under NSW legislation. It is your responsibility to contact the Department of Environment, Water, Heritage and the Arts in Canberra (6274 1111 or <http://www.environment.gov.au>) to determine if the proposal requires an approval under the EPBC Act. The Commonwealth Government has accredited the NSW environmental assessment process, so if it is determined that an approval is required under the EPBC Act, please contact the Department immediately as supplementary Director-General's requirements may need to be issued.

I would appreciate it if you would contact the Department at least two weeks before you propose to submit your Environmental Assessment for the project. This will enable the Department to determine the:


- applicable fee (see Division 1A, Part 15 of the Environmental Planning and Assessment Regulation 2000); and
- number of copies (hard-copy and CD-ROM) of the Environmental Assessment that will be required for exhibition purposes.

Once it receives the Environmental Assessment, the Department will review it in consultation with the relevant agencies to determine if it adequately addresses the Director-General's requirements, and may require you to revise it prior to public exhibition.

The Department is required to make all the relevant information associated with the project publicly available on its website. Consequently, I would appreciate it if you would ensure that all the documents you subsequently submit to the Department are in a suitable format for the web, and arrange for an electronic version of the Environmental Assessment to be hosted on a suitable website.

If you have any enquiries about these requirements, please contact Nicholas Hall on 9228 6438 or [nicholas.hall@planning.nsw.gov.au](mailto:nicholas.hall@planning.nsw.gov.au).

Yours sincerely



11.9.08

Chris Wilson  
**Executive Director**  
**Major Project Assessment**  
As delegate for the Director-General

# Director-General's Requirements

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

<b>Application Number</b>	MP 08_0135
<b>Project</b>	<p>Stage 2 of the Moolarben Coal Project, which includes:</p> <ul style="list-style-type: none"> <li>• extracting run-of-mine coal from the Ulan coal seam in an area to the east of the approved Stage 1 mining operations, using both open cut and longwall mining methods;</li> <li>• augmenting, upgrading and using the approved Stage 1 infrastructure at the mine to cater for both Stages 1 &amp; 2 of the project;</li> <li>• processing up to 17 million tonnes of run-of-mine coal a year from both Stages 1 &amp; 2 of the project;</li> <li>• transporting up to 13 million tonnes of product coal a year from Stages 1 &amp; 2 of the project to domestic and export markets by rail;</li> <li>• disposing of coal rejects and tailings on site; and</li> <li>• rehabilitating the site.</li> </ul>
<b>Location</b>	Approximately 40km north east of Mudgee and 25km east of Gulgong
<b>Proponent</b>	Moolarben Coal Pty Ltd
<b>Date of Issue</b>	11 September 2008
<b>General Requirements</b>	<p>The Environmental Assessment of the project must include:</p> <ul style="list-style-type: none"> <li>• an executive summary;</li> <li>• a detailed description of Stage 1 of the Moolarben Coal Project, and any relevant statutory approvals for this stage of the project;</li> <li>• a detailed description of the project, including the: <ul style="list-style-type: none"> <li>- need for the project;</li> <li>- alternatives considered;</li> <li>- likely interactions between Stages 1 &amp; 2 of the Moolarben Coal project;</li> <li>- likely staging of the project; and</li> <li>- plans of any proposed building works;</li> </ul> </li> <li>• a risk assessment of the potential environmental impacts of the project, identifying the key issues for further assessment;</li> <li>• a detailed assessment of the key issues specified below, and any other significant issues identified in the risk assessment (see above), which includes: <ul style="list-style-type: none"> <li>- a description of the existing environment, using sufficient baseline data;</li> <li>- an assessment of the potential impacts of all stages of the project, including any cumulative impacts associated with the concurrent operation of the project with any other existing or approved mining operations in the region, taking into consideration any relevant guidelines, policies, plans and statutory provisions (see below);</li> <li>- a description of the measures that would be implemented to avoid, minimise, mitigate, rehabilitate/remediate, monitor and/or offset the potential impacts of the project, including detailed contingency plans for managing any significant risks to the environment;</li> </ul> </li> <li>• a statement of commitments, outlining all the proposed environmental management and monitoring measures;</li> <li>• a conclusion justifying the project on economic, social and environmental grounds, taking into consideration whether the project is consistent with the objects of the <i>Environmental Planning &amp; Assessment Act 1979</i>;</li> <li>• a signed statement from the author of the Environmental Assessment, certifying that the information contained within the document is neither false nor misleading.</li> </ul>

<p><b>Key Issues</b></p>	<ul style="list-style-type: none"> <li>• <b>Subsidence</b> – including: <ul style="list-style-type: none"> <li>- accurate predictions of the potential subsidence effects of the proposed mine plan, and detailed sensitivity analysis of these predictions; and</li> <li>- a detailed assessment of the potential impacts of these subsidence effects on both the natural and built environment;</li> </ul> </li> <li>• <b>Soil &amp; Water</b> – including: <ul style="list-style-type: none"> <li>- a site water balance, which includes a detailed description of the measures that would be implemented to minimise water use on site and ensure that there is a secure water supply for both Stages 1 &amp; 2 of the Moolarben Coal Project;</li> <li>- a detailed assessment of the potential impacts of the project on the quantity, quality and long-term integrity of the surface and ground water resources in the project area, paying particular attention to all significant watercourses and their associated tributaries;</li> <li>- detailed conceptual plans for the proposed relocation of Murragamba and “Eastern” Creeks, which clearly articulate the vision statement, design criteria and completion criteria for the proposed creek relocations, and include sufficient evidence to demonstrate that the proposed creek relocations are both reasonable and feasible;</li> </ul> </li> <li>• <b>Biodiversity</b> – including: <ul style="list-style-type: none"> <li>- accurate estimates of any vegetation clearing associated with the project;</li> <li>- a detailed assessment of the potential impacts of the project on any terrestrial and aquatic threatened species, populations, ecological communities or their habitats; and</li> <li>- a detailed description of the measures that would be implemented to maintain or improve the biodiversity values of the surrounding region in the medium to long term;</li> </ul> </li> <li>• <b>Heritage</b> – both Aboriginal and non-Aboriginal;</li> <li>• <b>Noise &amp; Blasting</b> – including the potential construction, operational and off-site road and rail noise impacts;</li> <li>• <b>Air Quality;</b></li> <li>• <b>Greenhouse Gas</b> – including: <ul style="list-style-type: none"> <li>- a quantitative assessment of the potential scope 1, 2 and 3 greenhouse gas emissions of the project, and qualitative assessment of the potential impacts of these emissions on the environment; and</li> <li>- a detailed description of the measures that would be implemented on site to minimise the greenhouse gas emissions of the project ;</li> </ul> </li> <li>• <b>Transport</b> - including a detailed assessment of the potential impacts of the project on the safety and performance of both the road and rail network, and any associated railway crossings;</li> <li>• <b>Waste</b> – including: <ul style="list-style-type: none"> <li>- accurate estimates of the quantity and nature of the potential waste streams of the project;</li> <li>- a detailed description of the measures that would be implemented to minimise, reuse, recycle and dispose of any waste produced on site, including the proposed coal reject and tailings disposal strategy;</li> </ul> </li> <li>• <b>Hazards</b> – paying particular attention to public safety;</li> <li>• <b>Visual;</b></li> <li>• <b>Rehabilitation</b>– including a detailed description of the proposed rehabilitation strategy for the project, taking into consideration any relevant strategic land use planning or resource management plans or policies, and the scope for integrating this strategy with the rehabilitation and offset strategies of both Stage 1 of the Moolarben Coal Project and the adjoining mines; and</li> <li>• <b>Social &amp; Economic.</b></li> </ul>
<p><b>References</b></p>	<p>The environmental assessment of the key issues listed above should take into account relevant guidelines, policies, and plans. While not exhaustive, the following attachment contains a list of some of the guidelines, policies, and plans that may be relevant to the environmental assessment of this project.</p>

<p><b>Consultation</b></p>	<p>During the preparation of the Environmental Assessment, you should consult with the relevant local, State or Commonwealth Government authorities, service providers, community groups or affected landowners.</p> <p>In particular you must consult with the:</p> <ul style="list-style-type: none"> <li>• Department of Environment and Climate Change;</li> <li>• Department of Primary Industries;</li> <li>• Department of Water and Energy;</li> <li>• Roads and Traffic Authority; and</li> <li>• Mid-Western Regional Council.</li> </ul> <p>The consultation process, and the issues raised during this process, must be described in the Environmental Assessment.</p>
<p><b>Deemed refusal period</b></p>	<p>120 days</p>

# Policies, Guidelines & Plans

Aspect	Policy /Methodology
<b>Risk Assessment</b>	<p>AS/NZS 4360:2004 Risk Management (Standards Australia)</p> <p>HB 203: 203:2006 Environmental Risk Management – Principles &amp; Process (Standards Australia)</p>
<b>Subsidence</b>	<p>Guideline for Application for Subsidence Management Approvals (Department of Mineral Resources)</p>
<b>Soil and Water</b>	<p>Rural Land Capability Mapping (DLWC)</p> <p>Agricultural Land Classification (DPI)</p> <p>Australian and New Zealand Guidelines for the Assessment and Management of Contaminated Sites (ANZECC &amp; NHMRC)</p> <p>National Environment Protection (Assessment of Site Contamination) Measure 1999 (NEPC)</p> <p>Draft Guidelines for the Assessment &amp; Management of Groundwater Contamination (DECC)</p> <p>State Environmental Planning Policy No. 55 – Remediation of Land</p> <p>Managing Land Contamination – Planning Guidelines SEPP 55 – Remediation of Land (DOP)</p>
<i>Soil</i>	<p>National Water Quality Management Strategy: Water quality management - an outline of the policies (ANZECC/ARMCANZ)</p> <p>National Water Quality Management Strategy: Policies and principles - a reference document (ANZECC/ARMCANZ)</p> <p>National Water Quality Management Strategy: Implementation guidelines (ANZECC/ARMCANZ)</p> <p>National Water Quality Management Strategy: Australian Guidelines for Fresh and Marine Water Quality (ANZECC/ARMCANZ)</p> <p>National Water Quality Management Strategy: Australian Guidelines for Water Quality Monitoring and Reporting (ANZECC/ARMCANZ)</p> <p>Using the ANZECC Guideline and Water Quality Objectives in NSW (DEC)</p> <p>State Water Management Outcomes Plan</p> <p>NSW Government Water Quality and River Flow Environmental Objectives (DECC)</p>
<i>Surface Water</i>	<p>Approved Methods for the Sampling and Analysis of Water Pollutants in NSW (DEC)</p> <p>Drinking Water Catchments Regional Environmental Plan No. 1</p> <p>Managing Urban Stormwater: Soils &amp; Construction (Landcom)</p> <p>Managing Urban Stormwater: Treatment Techniques (DECC)</p> <p>Managing Urban Stormwater: Source Control (DECC)</p> <p>Floodplain Management Manual (DNR)</p> <p>Floodplain Risk Management Guideline (DECC)</p> <p>A Rehabilitation Manual for Australian Streams (LWRRDC and CRCCH)</p> <p>Technical Guidelines: Bunding &amp; Spill Management (DECC)</p> <p>National Water Quality Management Strategy: Guidelines for Sewerage Systems – Effluent Management (ARMCANZ/ANZECC)</p> <p>National Water Quality Management Strategy: Guidelines for Sewerage Systems – Use of Reclaimed Water (ARMCANZ/ANZECC)</p> <p>Environmental Guidelines: Use of Effluent by Irrigation (DECC)</p> <p>A Rehabilitation Manual for Australian Streams (LWRRDC)</p>



<i>Groundwater</i>	National Water Quality Management Strategy Guidelines for Groundwater Protection in Australia (ARMCANZ/ANZECC)
	NSW State Groundwater Policy Framework Document (DLWC)
	NSW State Groundwater Quality Protection Policy (DLWC)
	NSW State Groundwater Quantity Management Policy (DLWC) 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)
<b>Biodiversity</b>	
	Draft Guidelines for Threatened Species Assessment under Part 3A of the <i>Environmental Planning and Assessment Act 1979</i> (DEC)
	NSW Groundwater Dependent Ecosystem Policy (DLWC)
	Policy & Guidelines - Aquatic Habitat Management and Fish Conservation (NSW Fisheries)
	Policy & Guidelines - Fish Friendly Waterway Crossings (NSW Fisheries)
	State Environmental Planning Policy No. 44 – Koala Habitat Protection
<b>Heritage</b>	
<i>Aboriginal</i>	Draft Guidelines for Aboriginal Cultural Heritage Impact Assessment and Community Consultation (DEC)
<i>Non- Aboriginal</i>	NSW Heritage Manual (NSW Heritage Office & DUAP)
	The Burra Charter (The Australia ICOMOS charter for places of cultural significance)
<b>Noise</b>	
	NSW Industrial Noise Policy (DECC)
	Environmental Criteria for Road Traffic Noise (NSW EPA)
	Environmental Noise Control Manual (DECC)
<b>Air Quality</b>	
	Protection of the Environment Operations (Clean Air) Regulation 2002
	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)
<b>Greenhouse Gas</b>	
	National Greenhouse Accounts (NGA) Factors (AGO)
	Guidelines for Energy Savings Action Plans (DEUS)
<b>Transport</b>	
	Guide to Traffic Generating Development (RTA)
	Road Design Guide (RTA)
<b>Waste</b>	
	Waste Avoidance and Resource Recovery Strategy 2007 (DECC)
	Environmental Guidelines: Solid Waste Landfills (EPA)
	Environmental Guidelines: Assessment, Classification, and Management of Non-Liquid and Liquid Waste (EPA)
<b>Hazards</b>	
	State Environmental Planning Policy No. 33 – Hazardous and Offensive Development
	Applying SEPP 33 – Hazardous and Offensive Development Application Guidelines (DUAP)
	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)

---

**Social & 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)

---