



# Planning

**Major Development Assessment  
Industry & Mining**  
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Mr Ben Hiatt  
Senior Project Manager  
Ravensworth Operations Pty Ltd  
PO Box 294  
MUSWELLBROOK NSW 2059

Our Ref: S09/00049

Dear Mr Hiatt

**Director-General's Requirements  
Ravensworth Operations Project  
Application Number MP 09\_0176**

The Department has received your application for Ravensworth Operations 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 Sara Wilson on 9228 6574 or [sara.wilson@planning.nsw.gov.au](mailto:sara.wilson@planning.nsw.gov.au).

Yours sincerely

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>	09_0176
<b>Project</b>	<p>The Ravensworth Operations Project, which includes:</p> <ul style="list-style-type: none"> <li>• creating a mining complex to encompass open cut and underground operations at Ravensworth West, Narama, Cumnock No 1 Colliery, Ravensworth Underground mines;</li> <li>• extending open cut mining to the south west of existing operations and extracting up to 16 million tonnes ROM coal a year for up to 29 years;</li> <li>• upgrading the Ravensworth Coal Terminal and Coal Handling and Preparation Plant to allow up to 20 million tonnes of ROM coal a year to be processed by the Ravensworth complex and the Muswellbrook coal mine;</li> <li>• updating, augmenting and integrating all other existing surface facilities and infrastructure within the complex;</li> <li>• transporting coking coal to the export market by rail and transporting thermal coal by overland conveyor to Macquarie Generation for domestic power generation;</li> <li>• rehabilitating all disturbed areas across the complex; and</li> <li>• consolidating all the existing development consents for the open cut mining and surface facilities at the complex into a single, modern planning approval.</li> </ul>
<b>Location</b>	Approximately midway between Singleton and Muswellbrook
<b>Proponent</b>	Ravensworth Operations Pty Limited
<b>Date of Issue</b>	5 October 2009
<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: <ul style="list-style-type: none"> <li>- existing and approved mining operations and industrial development in the vicinity of the site;</li> <li>- historical mining operations on the site;</li> <li>- existing and approved mining operations and infrastructure on the site;</li> <li>- existing and/or approved biodiversity and heritage offset areas; and</li> <li>- the existing environmental management regimes;</li> </ul> </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, including justification for the proposed mine plan;</li> <li>- likely staging of the project;</li> <li>- likely interactions between the project and existing and approved mining operations; 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 on this environment, including any cumulative impacts, taking into consideration any relevant laws, policies, guidelines and plans, and</li> </ul> </li> </ul>

	<p>the findings of the Independent Review of Cumulative Impacts on Camberwell Village; and</p> <ul style="list-style-type: none"> <li>- a description of the measures that would be implemented to avoid, minimise, and if necessary offset the potential impacts of the project, including detailed contingency plans for managing any significant risks to the environment;</li> <li>• a statement of commitments, outlining the proposed environmental management and monitoring measures;</li> <li>• 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 the project is consistent with the objects of the <i>Environmental Planning &amp; Assessment Act 1979</i>; and</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>
<b>Key Issues</b>	<ul style="list-style-type: none"> <li>• <b>Air Quality</b> – including a quantitative assessment of potential air quality impacts of the project;</li> <li>• <b>Noise &amp; Blasting</b> – including a quantitative assessment of the potential: <ul style="list-style-type: none"> <li>- construction, operational and transport noise impacts;</li> <li>- blasting impacts of the project on people, livestock and property;</li> </ul> </li> <li>• <b>Biodiversity</b> – including: <ul style="list-style-type: none"> <li>- measures taken to avoid impacts on biodiversity;</li> <li>- accurate predictions of the proposed vegetation clearing;</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>- an offset strategy to ensure that the project will maintain or improve the biodiversity conservation value of the region;</li> </ul> </li> <li>• <b>Soil &amp; Water</b>– including: <ul style="list-style-type: none"> <li>- a site water balance for the project;</li> <li>- a detailed assessment of the potential impacts of the project, including quantitative modelling, and considering: <ul style="list-style-type: none"> <li>○ the quantity and quality of both surface water and groundwater resources;</li> <li>○ water users, both in the vicinity of and downstream of the project;</li> <li>○ the riparian and ecological values of the watercourses both on site and downstream of the project;</li> <li>○ environmental flows, including protection of the Hunter River regulated water source; and</li> <li>○ flooding.</li> </ul> </li> <li>- a detailed description of the proposed water management system for the project, including how this system would be integrated with the Greater Ravensworth Water Sharing System;</li> </ul> </li> <li>• <b>Transport</b> – including: <ul style="list-style-type: none"> <li>- accurate predictions of the road and rail traffic of the project;</li> <li>- a detailed assessment of the potential impacts of this traffic on the capacity, efficiency, and safety of the road and rail networks; and</li> <li>- a detailed description of the strategy for the proposed realignment of Lemington Road, including plans for the proposed road works;</li> </ul> </li> <li>• <b>Heritage</b> – both Aboriginal and non-Aboriginal;</li> <li>• <b>Visual</b> – including a detailed description of the measures that would be implemented to minimise the potential visual impacts for users of the New England Highway;</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 identification of which emissions would be covered by the Federal Government's Carbon Pollution Reduction Scheme;</li> <li>- a qualitative assessment of the potential impacts of these emissions on the environment; and</li> </ul> </li> </ul>

	<ul style="list-style-type: none"> <li>- an assessment of all reasonable and feasible measures that could be implemented on site to minimise the greenhouse gas emissions of the project and ensure it is energy efficient;</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, including tailings and coarse reject; and</li> <li>- a detailed description of the measures that would be implemented to minimise the production of waste on site, and ensure that any waste produced is appropriately handled and disposed of;</li> </ul> </li> <li>• <b>Rehabilitation</b>—a detailed description of the proposed rehabilitation strategy for the project area, including: <ul style="list-style-type: none"> <li>- rehabilitation objectives and proposed completion criteria;</li> <li>- nominate end land use, having regard to any relevant strategic land use planning or resource management plans or policies;</li> <li>- the potential for integrating this strategy with any other offset strategies in the region;</li> </ul> </li> <li>• <b>Social &amp; Economic</b> – including: <ul style="list-style-type: none"> <li>- an assessment of the potential impacts of the project on the local and regional community, paying particular attention to the demand it may generate for the provision of additional infrastructure and services; and</li> <li>- a detailed assessment of the costs and benefits of the project as a whole, and whether it would result in a net benefit for the NSW community.</li> </ul> </li> </ul>
<b>References</b>	The environmental assessment of the key issues listed above must 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.
<b>Consultation</b>	<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, Climate Change and Water;</li> <li>• Department of Industry and Investment;</li> <li>• NSW Office of Water;</li> <li>• Department of Transport and Infrastructure; and</li> <li>• Singleton Council.</li> </ul> <p>The consultation process, and the issues raised during this process, must be described in the Environmental Assessment.</p>
<b>Deemed refusal period</b>	120 days

# Policies, Guidelines & Plans

Aspect	Policy /Methodology
<b>Risk Assessment</b>	AS/NZS 4360:2004 Risk Management (Standards Australia) HB 203: 203:2006 Environmental Risk Management – Principles & Process (Standards Australia)
<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 (EPA) Approved Methods for the Sampling and Analysis of Air Pollutants in NSW (EPA)
<b>Noise &amp; Blasting</b>	NSW Industrial Noise Policy (EPA, 1999) Environmental Criteria for Road Traffic Noise (EPA, 1999) Interim Guideline for the Assessment of Noise From Rail Infrastructure Projects (DECC) Draft NSW Construction Noise Guideline (DECC, 2008) ANZECC Guideline to Minimise Annoyance Due to Blasting Overpressure & Ground Vibration (ANZECC)
<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 Guidelines for Developments Adjoining DEC Land (DEC)
<b>Soil and Water</b>	Rural Land Capability Mapping (DLWC) Agricultural Land Classification (DPI)
<i>Soil</i>	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, 1999) State Environmental Planning Policy No. 55 – Remediation of Land Managing Land Contamination – Planning Guidelines SEPP 55 – Remediation of Land (DOP)
<i>Surface Water</i>	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 Hunter Regulated River Water Source Water Sharing Plan (DIPNR, 2004) Hunter Unregulated and Alluvial Water Sources Water Sharing Plan 2009 NSW Government Water Quality and River Flow Objectives (DECC) Approved Methods for the Sampling and Analysis of Water Pollutants in NSW (DEC)

Groundwater	Managing Urban Stormwater: Soils & Construction (Landcom)
	Managing Urban Stormwater: Treatment Techniques (DECC)
	Managing Urban Stormwater: Source Control (DECC)
	Floodplain Management Manual (DNR)
	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)
	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)
	Draft NSW State Groundwater Quantity Management Policy (DLWC)
	Murray-Darling Basin Groundwater Quality. Sampling Guidelines. Technical Report No 3 (MDBC)
Transport	Murray-Darling Basin Commission. Groundwater Flow Modelling Guideline (Aquaterra Consulting Pty Ltd)
	Guidelines for the Assessment & Management of Groundwater Contamination (DECC, 2007)
Heritage	Guide to Traffic Generating Development (RTA)
	Road Design Guide (RTA)
Greenhouse Gas	Draft Guidelines for Aboriginal Cultural Heritage Impact Assessment and Community Consultation (DEC, 2005)
	The Burra Charter (The Australia ICOMOS charter for places of cultural significance)
	NSW Heritage Manual (NSW Heritage Office & DUAP)
Waste	National Greenhouse Accounts (NGA) Factors (AGO), Australian Depar
	Guidelines for Energy Savings Action Plans (DEUS)
	The Greenhouse Gas Protocol: Corporate Standard, World Council for Sustainable Business Development & World Resources Institute
Rehabilitation	Environmental Guidelines: Solid Waste Landfills (EPA)
	Waste Classification Guidelines (DECC)
	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)
Hazards	Synoptic plan: Integrated Landscapes for Coal Mine Rehabilitation in the Hunter Valley of NSW (DMR, 1999)
	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
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)