



**Planning &  
Infrastructure**

**Major Projects Assessment**

**Mining & Industry Projects**

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Ref: 10/04585

Mr Tony Israel  
Xstrata Mangoola Pty Ltd  
PO Box 495  
MUSWELLBROOK NSW 2333

Dear Mr Israel

**Section 75W Modification (MP 06\_0014 MOD 6)  
Mangoola Coal Open Cut Mine Modification  
Director-General's Requirements**

The Department has received your application to modify the Mangoola Coal Open Cut Mine under section 75W of the Environmental Planning and Assessment Act 1979.

I have attached a copy of the Director General's environmental assessment requirements (DGRs) for the preparation of an Environmental Assessment (EA) for the proposed modification.

These requirements have been prepared based on the information you have provided to date. Please note that the Department may alter these requirements at any time. The Department will review the EA carefully before putting it on public exhibition, and will require you to submit an amended EA if it does not adequately address the DGRs.

Your proposal may require separate approval under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). The Department encourages you to confirm whether such an approval will be required as soon as possible. If an EPBC Act approval is required, I would appreciate it if you would advise the Department accordingly, as the Commonwealth approval process may be integrated into the NSW approval process, and supplementary DGRs may need to be issued.

I would appreciate it if you would contact the Department at least two weeks before you propose to submit the EA. This will enable the Department to:

- confirm the applicable fee (see Division 1A, Part 15 of the *Environmental Planning and Assessment Regulation 2000*); and
- determine the number of copies (hard-copy and CD-ROM) of the EA required for review.

If you have any enquiries about these requirements, please contact David Mooney.

Yours sincerely

 3/12/12

David Kitto  
**Director**  
**Mining and Industry Projects**  
As the Director-General's nominee

# Director-General's Requirements

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

<b>Application Number</b>	MP 06_0014 MOD 6
<b>Modifications Description</b>	<p>Modifying the Mangoola Coal Project, including:</p> <ul style="list-style-type: none"> <li>• increasing run-of-mine (ROM) coal extraction from 10.5 Million tonnes per annum (Mtpa) to 13.5 Mtpa;</li> <li>• increasing operational employee levels from 300 to 450 employees;</li> <li>• establishing a water discharge point into the Hunter River, in accordance with the Hunter River Salinity Trading Scheme;</li> <li>• minor modifications to the coal handling and processing infrastructure and stockpiles; and</li> <li>• crushing waste rock for on-site use as gravel.</li> </ul>
<b>Location</b>	Wybong, approximately 20km west of Muswellbrook
<b>Proponent</b>	Xstrata Mangoola Pty Ltd
<b>Date of Issue</b>	3 December 2012
<b>General Requirements</b>	<p>The Environmental Assessment (EA) for the modification 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>.</p> <p>In addition, the EA must include a:</p> <ul style="list-style-type: none"> <li>• detailed description of the proposed modification, including the: <ul style="list-style-type: none"> <li>– need for the proposal;</li> <li>– justification for the proposed mine plan, including alternatives considered, efficiency of resource recovery, mine safety, and environmental protection;</li> <li>– likely staging of the proposal - including construction, operational stage/s and rehabilitation;</li> <li>– likely interactions between the proposal and existing, approved and proposed mining operations in the vicinity of the site; and</li> <li>– plans of any proposed building works;</li> </ul> </li> <li>• consideration of all relevant environmental planning instruments, including identification and justification of any inconsistencies with these instruments;</li> <li>• risk assessment of the potential environmental impacts of the development, identifying the key issues for further assessment;</li> <li>• detailed assessment of the key issues specified below, and any other significant issues identified in the risk assessment (above), including: <ul style="list-style-type: none"> <li>– a description of the existing environment, <u>using sufficient baseline data</u>;</li> <li>– an assessment of the potential impacts of all stages of the proposal, including any cumulative impacts, taking into consideration relevant guidelines, policies, plans and statutes; and</li> <li>– a description of the measures that would be implemented to avoid, minimise and if necessary, offset the potential impacts of the proposal, including proposals for adaptive management and/or contingency plans to manage any significant risks to the environment; and</li> </ul> </li> <li>• consolidated summary of all the proposed environmental management and monitoring measures, highlighting commitments included in the EA.</li> </ul> <p>The EA must be accompanied by a report from a qualified quantity surveyor providing:</p> <ul style="list-style-type: none"> <li>• 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</li> </ul>

	<p>proposal, including details of all the assumptions and components from which the CIV calculation is derived;</p> <ul style="list-style-type: none"> <li>• a close estimate of the jobs that will be created by the development during the construction and operational phases of the development; and</li> <li>• certification that the information provided is accurate at the date of preparation.</li> </ul>
<p><b>Key Issues</b></p>	<p>The EA must address the following specific matters:</p> <ul style="list-style-type: none"> <li>• <b>Air Quality</b> – including a quantitative assessment of potential: <ul style="list-style-type: none"> <li>- construction and operational impacts, with a particular focus on dust emissions including PM<sub>2.5</sub> and PM<sub>10</sub> emissions and dust generation from coal transport;</li> <li>- reasonable and feasible mitigation measures to minimise dust emissions, including evidence that there are no such measures available other than those proposed; and</li> <li>- monitoring and management measures, in particular real-time air quality monitoring;</li> </ul> </li> <li>• <b>Noise, Vibration &amp; Blasting</b> – including a quantitative assessment of potential: <ul style="list-style-type: none"> <li>- construction, operational and off-site transport noise impacts;</li> <li>- blasting impacts on people, livestock and property;</li> <li>- reasonable and feasible mitigation measures, including evidence that there are no such measures available other than those proposed; and</li> <li>- monitoring and management measures, in particular real-time, attended noise monitoring and predictive meteorological forecasting;</li> </ul> </li> <li>• <b>Water Resources</b> – including: <ul style="list-style-type: none"> <li>- 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 infrastructure and water storage structures; and</li> <li>- assessment of potential impacts on the quality and quantity of existing surface and ground water resources, including: <ul style="list-style-type: none"> <li>○ detailed information of potential impacts associated with proposed discharges under, and in compliance with, the Hunter River Salinity Trading Scheme; and</li> <li>○ impacts on riparian, ecological, geo-morphological and hydrological values of watercourses, including environmental flows;</li> </ul> </li> </ul> </li> <li>• <b>Social &amp; Economic</b> – including an assessment of the: <ul style="list-style-type: none"> <li>- potential direct and indirect economic benefits of the proposal for local and regional communities and the State;</li> <li>- potential impacts on local and regional communities, including: <ul style="list-style-type: none"> <li>○ increased demand for local and regional infrastructure and services (such as housing, childcare, health, education and emergency services); and</li> <li>○ impacts on social amenity;</li> </ul> </li> <li>- a detailed description of the measures that would be implemented to minimise the adverse social and economic impacts of the proposed modification, including any infrastructure improvements or contributions and/or voluntary planning agreement or similar mechanism; and</li> <li>- a detailed assessment of the costs and benefits of the proposed modification as a whole, and whether it would result in a net benefit for the NSW community; and</li> </ul> </li> <li>• <b>Traffic &amp; Transport</b> – including: <ul style="list-style-type: none"> <li>- a detailed assessment of the proposal on the capacity, efficiency and safety of the road and rail networks; and</li> <li>- a description of the measures that would be implemented to maintain and/or improve the capacity, efficiency and safety of the road and rail networks over the life of the project;</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 guidelines, policies and plans that may be relevant to the environmental assessment of this modification.
<b>Consultation</b>	<p>During the preparation of the EA, you should consult with the relevant local, State or Commonwealth government authorities, service providers, community groups or affected landowners. The consultation process and the issues raised must be described in the EA.</p> <p>In particular you must consult with the:</p> <ul style="list-style-type: none"> <li>• Commonwealth Department of Sustainability, Environment, Water, Population and Communities;</li> <li>• Office of Environment and Heritage (including the Heritage Branch);</li> <li>• Environment Protection Authority;</li> <li>• Division of Resources and Energy, within the Department of Trade and Investment, Regional Infrastructure and Services;</li> <li>• Department of Primary Industries (including the NSW Office of Water, Agriculture and Fisheries sections, Catchments and Lands (Crown Lands Division));</li> <li>• NSW Health;</li> <li>• Transport for NSW (including the Centre for Transport Planning and Roads and Maritime Services);</li> <li>• Australian Rail Track Corporation, and downstream coal chain operators including Railcorp and Newcastle Ports Corporation;</li> <li>• Hunter Central Rivers Catchment Management Authority; and</li> <li>• Muswellbrook Council.</li> </ul> <p>The EA must:</p> <ul style="list-style-type: none"> <li>• describe the consultation process used and demonstrate that effective consultation has occurred;</li> <li>• describe the issues raised by public authorities, service providers, community groups and landowners;</li> <li>• identify where the design of the proposed modification has been amended in response to issues raised; and</li> <li>• otherwise demonstrate that issues raised have been appropriately addressed in the assessment.</li> </ul>
<b>Deemed Refusal Period</b>	60 days

## 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

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

Policy & Guidelines - Fish Friendly Waterway Crossings (NSW Fisheries)

#### Water Resources

##### *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)

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 Hunter Unregulated and Alluvial Water Sources 2009

Hunter River Salinity Trading Scheme (EPA)

Approved Methods for the Sampling and Analysis of Water Pollutants in NSW (DEC)

	NSW Government Water Quality and River Flow Objectives (OEH)
	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)
<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)
	Any relevant Water Sharing Plan for groundwater and surface water resources
	NSW Aquifer Interference Policy 2012 (NOW)
<b>Air Quality</b>	
	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)
<b>Noise &amp; Blasting</b>	
	NSW Industrial Noise Policy (DECC)
	Environmental Noise Management Manual (RTA) Dec 2001
	Environmental Noise Management – Assessing Vibration: a technical guide (DEC)
	NSW Road Noise Policy (DECCW)
	Interim Guidelines for the Assessment of Noise From Rail Infrastructure Projects (DECC)
	Technical basis for guidelines to minimise annoyance due to blasting overpressure and ground vibration (ANZECC)
<b>Land Resources</b>	
	Agricultural Impact Statement Guideline 2012 (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)
	Rural Land Capability Mapping (DLWC)
	National Environment Protection (Assessment of Site Contamination) Measure 1999 (NEPC)
	Draft Guidelines for the Assessment & Management of Groundwater Contamination (DECC)
<b>Traffic &amp; Transport</b>	
	Guide to Traffic Generating Development (RTA)
	Road Design Guide (RTA)

<b>Heritage</b>	
<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)
	Ask First; A Guide to Respecting Indigenous Heritage Places and Values (AHC) 2002
	Aboriginal Cultural Heritage; Standards and Guidelines Kit (NSW NPWS) Working Draft 1997
	Aboriginal History and Heritage: A Guide (NSW Heritage Office)
	NPW Act 1974: Part 6 Approvals: Interim Community Consultation Requirements for Applicants (NSW NPWS) 2004
	Aboriginal Cultural Heritage Consultation and Investigation (RTA) 2008
	NSW Heritage Manual (NSW Heritage Office)
	The Burra Charter (The Australia ICOMOS charter for places of cultural significance)
	The Australian Natural Heritage Charter (For the Conservation of Places of Natural Heritage Significance) 2 <sup>nd</sup> ed. 2002
<i>Historic</i>	Standard Exemptions for Works Requiring Heritage Council Approval (NSW Heritage Office) 2006
	How to Prepare Archival Records Of Heritage Items (NSW Heritage Office)
	Photographic Recording of Heritage Items Using Film or Digital Capture (NSW Heritage Office) 2006
	Statements of Heritage Impact (NSW Heritage Office)
	Skeletal Remains: Guidelines for Management of Human Skeletal Remains under the Heritage Act 1977 (NSW Heritage Office) 1998
	NSW Heritage Manual: Assessing Heritage Significance (NSW Heritage Office) 2001
	NSW Heritage Manual: Conservation Management Documents 1996
	NSW Heritage Manual: Heritage Terms and Abbreviations 1996
	Historical Archaeology Code of Practice (NSW Heritage Council DoP) 2006
<b>Greenhouse Gases</b>	
	National Greenhouse Accounts Factors (Australian Department of Climate Change (DCC))
	Guidelines for Energy Savings Action Plans (DEUS)
	AGO Factors and Methods Workbook (AGO)
<b>Waste</b>	
	Waste Classification Guidelines (DECC)
<b>Hazards</b>	
	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
<b>Rehabilitation</b>	
	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)
<b>Socio-Economic</b>	
	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)

