# **Director-General's Requirements**

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

Application Number	11_0060
Project	<ul> <li>The Northparkes Step Change Project, which includes:</li> <li>extending copper/gold mining operations at Northparkes by 7 years (to 2032), by developing a new underground block cave mine, continuing the existing underground mines and developing new open cut mines and associated infrastructure;</li> <li>extracting and processing up to 8.5 million tonnes of ore per year;</li> <li>transporting concentrate from the mine site to port; and</li> <li>rehabilitating the site.</li> </ul>
Location	Northparkes Gold Mine, 27 kilometres north of Parkes
Proponent	North Mining Limited
Date of Issue	11 March 2013
General Requirements	The Environmental Assessment must include:  an executive summary;  a detailed description of the project including:  - need for the proposed development;  - a detailed resource and land use assessment;  - alternatives considered, including a detailed justification for the proposed mine plan;  - the likely inter-relationship between the proposed operations and the existing or approved mining operations at Northparkes;  - likely staging of the development - including construction, operational stage/s and rehabilitation; and  - plans of any proposed building works;  a 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 (see above), which includes:  - 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, including any cumulative impacts, taking into consideration any relevant guidelines, policies, plans and statutory provisions (see below);  - 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; and  - detailed contingency plans for managing any potentially significant risks to the environment;  a statement of commitments;  a conclusion justifying the project on economic, social and environmental grounds, taking into consideration whether the project is consistent with the objects of the Environmental Planning and Assessment Act 1979, including the principles of ecological sustainable development; and  a signed statement from the author of the Environmental Assessment certifying that the information contained in the report is neither false nor misleading.
Key Issues	The Environmental Assessment must address the following specific issues:  • Land Resources – including an Agricultural Impact Statement which includes a detailed assessment of the potential impacts on:  - soils and land capability (including salinisation and contamination);

- landforms and topography, including surface drainage, rock formations, subsidence, steep slopes, etc; and
- land use, including agricultural, forestry, conservation and recreational use;

#### • Water Resources – including:

- A detailed assessment of potential impacts on the quality and quantity of existing surface and ground water resources in accordance with the NSW Aquifer Interference Policy, including:
  - detailed modelling of potential groundwater impacts including identification of any highly productive groundwater (as defined by the Aquifer Interference Policy) or groundwater dependent ecosystems;
  - impacts on affected licensed water users and basic landholder rights; and
  - impacts on riparian, ecological, geomorphological and hydrological values of watercourses, including watercourse diversions and environmental flows;
- 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;
- an assessment of proposed water discharge quantities and quality/ies against receiving water quality and flow objectives;
- identification of any licensing requirements or other approvals under the *Water Act 1912* and/or *Water Management Act 2000*;
- 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; and
- a detailed description of the proposed water management system (including sewage), water monitoring program and other measures to mitigate surface and groundwater impacts;

#### • Waste – including:

- accurate estimates of the quantity and nature of the potential waste streams of the development, including tailings, leachate and acidgenerating potential;
- an assessment of the construction, operation and final landform of proposed waste rock emplacements and tailings storage facilities;
- a leachate disposal strategy; and
- a description of measures that would be implemented to minimise production of other waste, and ensure that that waste is appropriately managed;

#### Biodiversity – including:

- measures taken to avoid, reduce or mitigate impacts on biodiversity;
- accurate estimates of proposed vegetation clearing;
- a detailed assessment of potential impacts of the development on any:
  - terrestrial or aquatic threatened species or populations and their habitats, endangered ecological communities and groundwater dependent ecosystems; and
  - regionally significant remnant vegetation, or vegetation corridors;
- if proposed, a comprehensive offset strategy to ensure the development maintains or improves the terrestrial and aquatic biodiversity values of the region in the medium to long term;
- Noise, Vibration & Blasting including a quantitative assessment of potential:
  - construction, operational and off-site transport noise impacts;
  - blasting impacts on people, livestock and property;
  - reasonable and feasible mitigation measures, including evidence 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;

- Air Quality including a quantitative assessment of potential:
  - construction and operational impacts, with a particular focus on extraction, processing and transport dust emissions, as well as diesel and blast fume emissions;
  - reasonable and feasible mitigation measures to minimise processing, dust, diesel and blast fume emissions, including evidence that there are no such measures available other than those proposed; and
  - monitoring and management measures, in particular real-time air quality monitoring;

#### • **Heritage** – including:

- an Aboriginal cultural heritage assessment (including both cultural and archaeological significance) which must:
  - demonstrate effective consultation with Aboriginal communities in determining and assessing impacts, and developing and selecting mitigation options and measures;
  - 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:
  - include a statement of heritage impact (including significance assessment) for any State significant or locally significant historic heritage items; and
  - outline any proposed mitigation and management measures (including an evaluation of the effectiveness and reliability of the measures);

### • Traffic & Transport – including:

- accurate predictions of the road traffic generated by the construction and operation of the project;
- an assessment of potential traffic impacts on the safety and efficiency of the road network; and
- a detailed description of the measures that would be implemented to maintain and/or improve the capacity, efficiency and safety of the road networks in the surrounding area over the life of the project;

### • **Hazards** – including:

- a detailed description of the management of process chemicals including transport, storage and handling; and
- bushfires;

## • Visual – including:

- a detailed assessment of the:
  - changing landforms on the site during the various stages of the project; and
  - potential visual impacts of the project on private landowners in the surrounding area as well as key vantage points in the public domain, including lighting impacts; and
- a detailed description of the measures that would be implemented to minimise the visual impacts of the project;

#### • 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 project 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 (such as housing, childcare, health, education and emergency services); and
  - o impacts on social amenity;
- a detailed description of the measures that would be implemented to minimise the adverse social and economic impacts of the project, including any infrastructure improvements or contributions and/or

	voluntary planning agreement or similar mechanism; and
	<ul> <li>voluntary planning agreement or similar mechanism; and</li> <li>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;</li> <li>Rehabilitation – including the proposed rehabilitation strategy for the site, having regard to the key principles in the Strategic Framework for Mine Closure, including:         <ul> <li>rehabilitation objectives, methodology, monitoring programs, performance standards and proposed completion criteria;</li> <li>nominated final land use, having regard to any relevant strategic land use planning or resource management plans or policies; and</li> </ul> </li> <li>the potential for integrating this strategy with any other rehabilitation and/or offset strategies in the region.</li> </ul>
Consultation	During the preparation of the Environmental Assessment, you should undertake an appropriate level of consultation with the relevant local, State or Commonwealth government authorities, service providers, community groups or affected landowners.  In particular you must consult with the:  Commonwealth Department of Sustainability, Environment, Water, Population and Communities;  Environment Protection Authority;  Office of Environment and Heritage (including its Heritage Branch);  Department of Primary Industries (including the NSW Office of Water, NSW Forestry, Agriculture and Fisheries sections, Catchments and Lands (Crown Lands Division));  Division of Resources and Energy within the Department of Trade and Investment, Regional Infrastructure and Services;  Transport for NSW (including the Centre for Transport Planning, Roads and Maritime Services);  Dams Safety Committee;  Mine Subsidence Board;  Forbes Shire Council; and  Parkes Shire Council.  The Environmental Assessment 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 an Environmental Assessment 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 environmental requirements.
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.
Deemed Refusal Period	90 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

	AS/NZS 4360:2004 Risk Management (Standards Australia)
	HB 203: 203:2006 Environmental Risk Management – Principles & Process
	(Standards Australia)
Land Resources	
	Agricultural Impact Assessment Guidelines 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)
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)
	Using the ANZECC Guideline and Water Quality Objectives in NSW (DEC)
	State Water Management Outcomes Plan
Surface Water	NSW Government Water Quality and River Flow Objectives (DECC)
Surface Water	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)
	Office of Water Guidelines for Controlled Activities (2012)
	NSW Aquifer Interference Policy (DPI, 2012)
	National Water Quality Management Strategy Guidelines for Groundwater
	Protection in Australia (ARMCANZ/ANZECC)
Groundwater	NSW State Groundwater Policy Framework Document (DLWC, 1997)
o. Janawator	NSW State Groundwater Quality Protection Policy (DLWC, 1998)
	NSW State Groundwater Quantity Management Policy (DLWC, 1998)
	Murray-Darling Basin Groundwater Quality. Sampling Guidelines. Technical Repor 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
Waste	
	Waste Classification Guidelines (DECC)
	Environmental Guidelines – Management of Tailings Storage Facilities (VIC DPI,
	2006)
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)
	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)
	Policy & Guidelines - Fish Friendly Waterway Crossings (NSW Fisheries)
	State Environmental Planning Policy No. 44 – Koala Habitat Protection
	Principles for the Use of Biodiversity Offsets in NSW (OEH)
Noise & Blasting	
	NSW Industrial Noise Policy (DECC)
	Environmental Noise Management – Assessing Vibration: a technical guide (DEC)
	NSW Road Noise Policy (DECCW)
	Technical basis for guidelines to minimise annoyance due to blasting overpressure and ground vibration (ANZECC)
Air Quality	
	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)
Heritage	
Aboriginal	Draft Guidelines for Aboriginal Cultural Heritage Assessment and Community
	Consultation (DEC 2005)  The Burra Charter (The Australia ICOMOS charter for places of cultural
	significance) NSW Heritage Manual (NSW Heritage Office)
Historic	The Burra Charter (The Australia ICOMOS charter for places of cultural significance)
Traffic & Transport	Significance)
	Guide to Traffic Generating Development (RTA)
	Road Design Guide (RTA)
Hazards	Noad Design Guide (NTA)
i ideai do	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
	,
Greenhouse Gases	
Greenhouse Gases	National Greenhouse Accounts Factors (Australian Department of Climate Change (DCC))
Greenhouse Gases	(DCC))
Greenhouse Gases Socio-Economic	(DCC))

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)
	Strategic Framework for Mine Closure (ANZMEC-MCA)