

Environmental Assessment Requirements

State Significant Development

Section 78A(8A) of the *Environmental Planning and Assessment Act 1979*

Schedule 2 of the *Environmental Planning and Assessment Regulation 2000*

Application Number	SSD 5537
Proposal	<p>The Hawsons Iron Project which includes:</p> <ul style="list-style-type: none">• developing an open cut magnetite mine and associated infrastructure;• extracting and processing up to 85 million tonnes (Mt) of ore a year to produce up to 12 Mt of magnetite concentrate a year for up to 20 years;• transporting concentrate to Broken Hill via a slurry pipeline for further processing and then to port via rail for export; and• progressively rehabilitating the site.
Location	60 kilometres south-west of Broken Hill, in the unincorporated Western Division
Applicant	Carpentaria Exploration Limited
Date of Issue	2 May 2017
General Requirements	<p>The Environmental Impact Statement (EIS) for the development must comply with the requirements in Schedule 2 of the <i>Environmental Planning and Assessment Regulation 2000</i>.</p> <p>In particular, the EIS must include:</p> <ul style="list-style-type: none">• a stand-alone executive summary;• a full description of the development, including:<ul style="list-style-type: none">- the resource to be extracted, demonstrating efficient resource recovery within environmental constraints;- the mine layout and scheduling;- minerals processing;- surface infrastructure and facilities (including any infrastructure that would be required for the development, but the subject of a separate approvals process);- a waste (overburden, tailings, etc.) management strategy;- a water management strategy;- a rehabilitation strategy; and- the likely interactions between the development and any other existing, approved or proposed mining related development in the vicinity of the site;• a strategic justification of the development focusing on site selection and the suitability of the proposed site;• a list of any approvals that must be obtained before the development may commence;• an assessment of the likely impacts of the development on the environment, focusing on the specific issues identified below, including:<ul style="list-style-type: none">- a description of the existing environment likely to be affected by the development, using sufficient baseline data;- an assessment of the potential impacts of all stages of the development, including any cumulative impacts, taking into consideration relevant laws, environmental planning instruments, guidelines, policies, plans and industry codes of practice;- a description of the measures that would be implemented to avoid, mitigate and/or offset the impacts of the development, and an assessment of:<ul style="list-style-type: none">○ whether these measures are consistent with industry best practice, and represent the full range of reasonable and feasible mitigation measures that could be implemented;○ the likely effectiveness of these measures; and

	<ul style="list-style-type: none"> ○ whether contingency plans would be necessary to manage any residual risks; and - a description of the measures that would be implemented to monitor and report on the environmental performance of the development; ● a consolidated summary of all the proposed environmental management and monitoring measures, identifying all the commitments in the EIS; ● consideration of the development against all relevant environmental planning instruments (including Part 3 of the <i>State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007</i>); and ● the reasons why the development should be approved having regard to: <ul style="list-style-type: none"> - relevant matters for consideration under the <i>Environmental Planning and Assessment Act 1979</i>, including the objects of the Act and how the principles of ecologically sustainable development have been incorporated in the design, construction and ongoing operations of the development; - the biophysical, economic and social costs and benefits of the development; - the suitability of the site with respect to potential land use conflicts with existing and future surrounding land uses; and - feasible alternatives to the development (and its key components), including the consequences of not carrying out the development. <p>While not exhaustive, Attachment 1 contains a list of some of the environmental planning instruments, guidelines, policies, and plans that may be relevant to the environmental assessment of this development.</p> <p>In addition to the matters set out in Schedule 1 of the <i>Environmental Planning and Assessment Regulation 2000</i>, the development application must be accompanied by a signed report from a suitably qualified and independent person that includes an accurate estimate of the capital investment value of the development (as defined in Clause 3 of the <i>Environmental Planning and Assessment Regulation 2000</i>), including details of all the assumptions and components from which the capital investment value calculation is derived.</p>
<p>Specific Issues</p>	<p>The EIS must address the following specific issues:</p> <ul style="list-style-type: none"> ● Land – including: <ul style="list-style-type: none"> - an assessment of the likely impacts of the development on the soils and land capability of the site and surrounds; - an assessment of the likely agricultural impacts of the development, including identification of any strategic agricultural land; - an assessment of the likely impact of the development on landforms (topography), including the long term geotechnical stability of any new landforms on site; and - an assessment of the compatibility of the development with other land uses in the vicinity of the development in accordance with the requirements of Clause 12 of <i>State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007</i>, paying particular attention to the agricultural land use in the region; ● Water – including: <ul style="list-style-type: none"> - an assessment of the likely impacts of the development on the quantity and quality of the region’s surface and groundwater resources; - an assessment of the likely impacts of the development on aquifers, watercourses, riparian land, water-related infrastructure, and other water users; - 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; - 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;
- **Biodiversity** – including:
 - an assessment of the likely biodiversity impacts of the development, having regard to the *NSW Biodiversity Offsets Policy for Major Projects*, and in accordance with the *Framework for Biodiversity Assessment*; and
 - a strategy to offset any residual impacts of the development in accordance with the *NSW Biodiversity Offsets Policy for Major Projects*;
- **Heritage** – including an assessment of the likely Aboriginal and historic heritage (cultural and archaeological) impacts of the development, including adequate consultation with the local Aboriginal community;
- **Air Quality** – including:
 - an assessment of the likely air quality impacts of the development in accordance with the *Approved Methods and Guidance for the Modelling and Assessment of Air Pollutants in NSW*, and having regard to the NSW Government's *Voluntary Land Acquisition and Mitigation Policy*; and
 - an assessment of the likely greenhouse gas impacts of the development;
- **Noise and Blasting** – including:
 - an assessment of the likely operational noise impacts of the development (including construction noise) in accordance with the *NSW Industrial Noise Policy* (as may be updated or replaced), paying particular attention to the obligations in chapters 8 and 9 of the policy, and the *Voluntary Land Acquisition and Mitigation Policy*;
 - if a claim is made for specific construction noise criteria for certain activities, then this claim must be justified and accompanied by an assessment of the likely construction noise impacts of these activities in accordance with the *Interim Construction Noise Guideline*;
 - an assessment of the likely road noise impacts of the development in accordance with the *NSW Road Noise Policy*;
 - an assessment of the likely rail noise impacts of the development in accordance with the *Rail Infrastructure Noise Guideline*; and
 - an assessment of the likely blasting impacts of the development on people, animals, buildings and infrastructure, and significant natural features, having regard to the relevant ANZECC guidelines;
- **Transport** – including:
 - an assessment of the likely transport impacts of the development on the capacity, condition, safety and efficiency of road and rail networks; and
 - a description of the measures that would be implemented to mitigate any impacts, including any proposed upgrades developed in consultation with the relevant road and rail authorities (if required);
- **Hazards** - including an assessment of the likely risks to public safety, paying particular attention to potential bushfire risks and the handling, transport and use of any dangerous goods;
- **Visual** – including an assessment of the likely visual impacts of the development on private landowners in the vicinity of the development and key vantage points in the public domain, paying particular attention to any temporary and permanent modification of the landscape (tailings storage facilities, overburden dumps, bunds, etc.), and minimising the lighting impacts of the development; and
- **Socio-Economic** – including:
 - an assessment of the likely social impacts of the development; and
 - an assessment of the likely economic impacts of the development, paying particular attention to:
 - the significance of the resource;
 - economic benefits of the project for the State and region; and
 - the demand for the provision of local infrastructure and services.

Consultation	<p>During the preparation of the EIS, you should consult with relevant local, State or Commonwealth Government authorities, infrastructure and service providers, community groups and affected landowners.</p> <p>The EIS must describe the consultation that was carried out, identify the issues raised during this consultation, and explain how these issues have been addressed in the EIS.</p>
Further consultation after 2 years	<p>If you do not lodge a development application and EIS for the development within 2 years of the issue date of these requirements, you must consult further with the Secretary in relation to the preparation of the EIS.</p>

ATTACHMENT 1

Environmental Planning Instruments, Policies, Guidelines & Plans

Land	
	Agricultural Impact Assessment Guidelines 2012 (DP&I)
	Agfact AC25: Agricultural Land Classification (NSW Agriculture)
	Soil and Landscape Issues in Environmental Impact Assessment (NOW)
	Australian Soil and Land Survey Handbook (CSIRO)
	Guidelines for Surveying Soil and Land Resources (CSIRO)
	The land and soil capability assessment scheme: second approximation (OEH)
Water	
Water Sharing Plans	NSW Murray Darling Basin Porous Rock Groundwater Sources 2012
	Lower Murray Darling Unregulated and Alluvial Water Sources 2012
Groundwater	NSW State Groundwater Policy Framework Document (NOW)
	NSW State Groundwater Quality Protection Policy (NOW)
	NSW Aquifer Interference Policy 2012 (NOW)
	Australian Groundwater Modelling Guidelines 2012 (Commonwealth)
	National Water Quality Management Strategy Guidelines for Groundwater Protection in Australia (ARMCANZ/ANZECC)
	Guidelines for the Assessment & Management of Groundwater Contamination (EPA)
	Murray-Darling Basin Groundwater Quality. Sampling Guidelines. Technical Report No 3 (MDBC)
Murray-Darling Basin Commission. Groundwater Flow Modelling Guideline (Aquaterra Consulting Pty Ltd)	
Surface Water	NSW State Rivers and Estuary Policy (NOW)
	NSW Government Water Quality and River Flow Objectives (EPA)
	Using the ANZECC Guideline and Water Quality Objectives in NSW (EPA)
	ANZECC Guidelines for Fresh and Marine Water Quality (ANZECC/ARMCANZ)
	National Water Quality Management Strategy: Australian Guidelines for Water Quality Monitoring and Reporting (ANZECC/ARMCANZ)
	Approved Methods for the Sampling and Analysis of Water Pollutants in NSW (EPA)
	Managing Urban Stormwater: Soils & Construction (Landcom) and associated Volumes 2A to 2E (DECC)
	Managing Urban Stormwater: Treatment Techniques (EPA)
	Managing Urban Stormwater: Source Control (EPA)
	Technical Guidelines: Bunding & Spill Management (EPA)
A Rehabilitation Manual for Australian Streams (LWRRDC and CRCCH)	
NSW Guidelines for Controlled Activities (NOW)	
Flooding	Floodplain Development Manual (OEH)
	Floodplain Risk Management Guideline (OEH)
Biodiversity	
	NSW Biodiversity Offsets Policy for Major Projects (OEH)
	Framework for Biodiversity Assessment (OEH)
	Threatened Species Assessment Guidelines - Assessment of Significance (OEH)
	NSW State Groundwater Dependent Ecosystem Policy (NOW)
	Risk Assessment Guidelines for Groundwater Dependent Ecosystems (NOW)
	Policy and Guidelines for Fish Habitat Conservation and Management (DPI Fisheries)
Heritage	
	Aboriginal Cultural Heritage Consultation Requirements for Proponents (OEH)
	Code of Practice for Archaeological Investigations of Aboriginal Objects in NSW (OEH)

	<p>Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW (OEH).</p> <p>NSW Heritage Manual (OEH)</p> <p>The Burra Charter (The Australia ICOMOS charter for places of cultural significance)</p>
Air Quality	<p>Voluntary Land Acquisition and Mitigation Policy: For State Significant Mining, Petroleum and Extractive Industry Developments (DPE 2014)</p> <p>Approved Methods for the Sampling and Analysis of Air Pollutants in NSW (EPA)</p> <p>Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (EPA)</p> <p>National Greenhouse Accounts Factors (Commonwealth)</p>
Noise & Blasting	<p>Voluntary Land Acquisition and Mitigation Policy: For State Significant Mining, Petroleum and Extractive Industry Developments (DPE 2014)</p> <p>NSW Industrial Noise Policy (EPA)</p> <p>Interim Construction Noise Guideline (EPA)</p> <p>NSW Road Noise Policy (EPA)</p> <p>Rail Infrastructure Noise Guideline (EPA)</p> <p>Assessing Vibration: a technical guide (DEC)</p> <p>Technical basis for guidelines to minimise annoyance due to blasting overpressure and ground vibration (ANZECC)</p>
Transport	<p>Guide to Traffic Generating Developments (RTA)</p> <p>Road Design Guide (RMS) & relevant Austroads Standards</p>
Hazards	<p>Hazardous and Offensive Development Application Guidelines – Applying SEPP 33</p> <p>Hazardous Industry Planning Advisory Paper No. 6 – Guidelines for Hazard Analysis</p>
Waste	<p>Waste Classification Guidelines (EPA)</p>
Resource	<p>Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves 2012 (JORC)</p>
Rehabilitation	<p>Mine Rehabilitation – Leading Practice Sustainable Development Program for the Mining Industry (Commonwealth)</p> <p>Mine Closure and Completion – Leading Practice Sustainable Development Program for the Mining Industry (Commonwealth)</p> <p>Strategic Framework for Mine Closure (ANZMEC-MCA)</p>
Environmental Planning Instruments	<p>State Environmental Planning Policy (State and Regional Development) 2011</p> <p>State Environmental Planning Policy (Infrastructure) 2007</p> <p>State Environmental Planning Policy (Rural Lands) 2008</p> <p>State Environmental Planning Policy No. 44 – Koala Habitat Protection</p> <p>State Environmental Planning Policy No. 55 – Remediation of Land</p> <p>State Environmental Planning Policy No. 33 – Hazardous and Offensive Development</p> <p>Broken Hill Local Environment Plan 2013</p>