

Planning Secretary's Environmental Assessment Requirements

**Section 4.12(8) of the *Environmental Planning and Assessment Act 1979*
Schedule 2 of the *Environmental Planning and Assessment Regulation 2000***

Application Number	SSD 10426
Proposal	<p>Broken Hill Cobalt Project, which includes:</p> <ul style="list-style-type: none">developing an open cut mine and associated infrastructure, including ore processing, stockpiling, tailings management and on-site water management facilities;extracting and processing up to 100 million tonnes of ore for up to 20 years;construction and operation of a rail siding and associated infrastructure adjacent to the Broken Hill rail line;developing power and water supply infrastructure adjacent to the railway line between the site and Broken Hill;transporting processed ore from the mine via rail to Port Adelaide for export or domestic use; andprogressively rehabilitating the site.
Location	Approximately 25 kilometres south west of Broken Hill, within the Unincorporated Area of NSW and City of Broken Hill local government area
Applicant	Broken Hill Cobalt Project Pty Ltd
Date of Issue	18 February 2020
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;details of ore and waste mineralogy;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; andthe 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,

	<p>including any cumulative impacts, taking into consideration relevant laws, environmental planning instruments, guidelines, policies, plans and industry codes of practice;</p> <ul style="list-style-type: none"> - 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"> o whether these measures are consistent with industry best practice, and represent the full range of reasonable and feasible mitigation measures that could be implemented; o the likely effectiveness of these measures; and o 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; <ul style="list-style-type: none"> - 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 - a conclusion evaluating the merits of the project as a whole, having regard to the requirements in Section 4.15 of the <i>Environmental Planning and Assessment Act 1979</i>; and - a signed statement from the author of the EIS, certifying that the information contained within the document is neither false nor misleading. <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 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>
Specific Issues	<p>The EIS must address the following specific issues:</p> <ul style="list-style-type: none"> - Land – including an assessment of: <ul style="list-style-type: none"> - the likely impacts of the development on the soils and land capability of the site and surrounds, and a description of the mitigation and management measures to prevent, control or minimise impacts of the development; - the likely agricultural impacts of the development, including biosecurity risks, consideration of the impact on pastoral holdings and the rangeland environment; - the likely impact of the development on landforms (topography), including the long-term geotechnical stability of any new landforms on site; and - 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; - Air Quality and Human Health – including: <ul style="list-style-type: none"> - an assessment of the likely air quality impacts of the development, including cumulative impacts from nearby developments, in accordance with the <i>Approved Methods and Guidance for the Modelling and Assessment of Air Pollutants in NSW</i>; - an assessment of the likely greenhouse gas impacts of the development;

- a description of the feasibility of measures that would be implemented to monitor and report on the emissions (including fugitive dust and greenhouse gases) of the development; and
- a Human Health Risk Assessment, addressing how the project's environmental impacts in relation to air quality (including cobalt dust) may impact on public health, including monitoring and management measure to avoid/reduce the public health impacts;
- **Water** – including:
 - an assessment of the likely impacts of the development on the quantity and quality of the region's surface and groundwater resources, having regard to the *NSW Aquifer Interference Policy*;
 - an assessment of the likely impacts of the development on aquifers, watercourses, riparian land, water-related infrastructure, basic landholder rights and other water users;
 - a detailed site water balance, including a description of site water demands with sensitivity analysis over a range of climatic conditions (including conditions of climate change projections), water disposal methods (including the location, volume and frequency of any water discharges and management of discharge water quality), water supply arrangements (including pipelines and water storage structures) for construction and operations, including:
 - o an assessment of the reliability of water supply, including consideration of climate change; and
 - o demonstration that water can be obtained from an appropriately authorised supply in accordance with the operating rules of any relevant Water Sharing Plan (WSP);
 - identification of any licensing requirements or other approvals under the *Water Act 1912* and/or *Water Management Act 2000*, including 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;
 - a detailed description of the proposed water management system (including sewerage systems), water diversions, water monitoring program and measures to mitigate surface and groundwater impacts;
 - a description of erosion and sediment controls, assessment and management of salinity and/or acid-sulphate risks, steep gradient land or erodible soils types, and any contingency requirements to address residual impacts; and
 - an assessment of the potential flooding impacts of the project;
- **Noise, Vibration and Blasting** – including an assessment of:
 - the likely construction, operational and transport noise impacts of the development, and cumulative noise impacts (considering other developments in the locality), in accordance with the *NSW Noise Policy for Industry, NSW Road Noise Policy and Rail Infrastructure Noise Guideline* (as applicable), and the *Voluntary Land Acquisition and Mitigation Policy*; and
 - the likely blasting impacts of the development on people, animals, buildings and infrastructure, and significant natural features, having regard to the relevant ANZECC guidelines;
- **Biodiversity** – including:
 - an assessment of the biodiversity values and the likely biodiversity impacts of the development throughout its life, and cumulative biodiversity impacts, in accordance with Section 7.9 of the *Biodiversity Conservation Act 2016 (NSW)*, and the *Biodiversity Assessment Method* (BAM), and documented in a Biodiversity Development Assessment Report (BDAR);
 - a detailed description of the proposed regime for avoiding, minimising, managing and reporting on the biodiversity impacts of the development over time; and

- a strategy to offset any residual impacts of the development in accordance with the *Biodiversity Conservation Act 2016 (NSW)*;
- **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 having regard to the *Aboriginal Cultural Heritage Consultation Requirements for Proponents* (OEH, 2010), and a Statement of Heritage Impact (SOHI), prepared by a suitably qualified heritage consultant in accordance with the guidelines in the *NSW Heritage Manual*;
- **Transport** – including:
 - details of traffic types and volumes likely to be generated by the project;
 - an assessment of the likely transport impacts of the development on the capacity, condition, safety and efficiency of the road network (including Barrier Highway), and cumulative impacts (considering other mining developments in the locality); and
 - a description of the measures that would be implemented to mitigate and/or manage any impacts, including any proposed road and rail upgrades, road and rail maintenance contributions, and other traffic control measures developed in consultation with the relevant road and rail authorities;
- **Waste** – including:
 - estimates of the quantity and nature of the waste streams that would be generated by the development during construction and operation (including tailings and waste rock) and any measures that would be implemented to minimise, manage or dispose of the waste streams;
 - a life of mine tailings management strategy, detailing risk assessment based on the tailings composition and identification, quantification and classification of the potential waste streams likely to be generated during construction and operation, including and not limited to leaching of waste into groundwater and flow of waste into nearby drainage lines (e.g. Felspar and Pine Creeks) and downstream, non-production wastes, reagent materials and potentially acid forming (PAF) waste; and
 - description of the measures to be implemented to store, manage, reuse, recycle and safely dispose of these materials in accordance with the *Protection of the Environment Operations (Waste) Regulation 2014*, including and not limited to operational water by-products, adequate spill detection and clean up systems, suitable locations for disposal or reuse of spoil generated during construction;
- **Hazards** - including an assessment of the likely risks to public safety, paying particular attention to potential geochemical risks, and the handling, transport and use of any dangerous goods, and in accordance with *State Environmental Planning Policy No. 33 – Hazardous and Offensive Development*;
- **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 (overburden dumps, bunds, etc.), cumulative impacts (considering other mining developments in the locality), and minimising the lighting impacts of the development;
- **Closure, Rehabilitation and Final Landform** – including:
 - a detailed overview of the final land-use for the development, including the mine site and ancillary infrastructure;
 - a description of final landform design objectives, having regard to achieving a natural landform that is safe, stable, non-polluting, fit for the nominated post-mining lands use and sympathetic with surrounding landforms;
 - a strategy to minimise the size of the final void (and its catchment);
 - a strategy for an integrated waste landform for managing waste rock and tailings; and

	<ul style="list-style-type: none"> - the proposed rehabilitation and mine closure strategies for the site having regard to the key principles in the Strategic Framework for Mine Closure, including rehabilitation objectives, methodology, monitoring programs, performance standards and proposed completion criteria; and - Socio-Economic – including: <ul style="list-style-type: none"> - an assessment of the social impacts of the development, prepared in accordance with the <i>Social Impact Assessment Guideline for State Significant Mining, Petroleum Production and Extractive Industry Development</i> (2017), including impacts of the development on the local community, cumulative impacts (considering other mining developments in the locality), and consideration of workforce accommodation; and - an assessment of the likely economic impacts of the development, paying particular attention to: <ul style="list-style-type: none"> o the significance of the resource; o the costs and benefits of the development; identifying whether the development as a whole would result in a net benefit to NSW and region, including consideration of fluctuation in commodity markets and exchange rates; and o 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, Registered Aboriginal Parties (RAPs), affected landowners, exploration licence holders, quarry operators and mineral title holders.</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 Planning Secretary in relation to the preparation of the EIS.</p>

ATTACHMENT 1

Environmental Planning Instruments, Policies, Guidelines & Plans

Land	Primefact 1063: Infrastructure proposals on rural land (DPI) 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 Plan for the New South Wales Murray and Lower Darling Regulated Rivers Water Sources 2016 Water Sharing Plan for the NSW Murray Darling Basin Porous Rock Groundwater Sources 2011 Water Sharing Plan for the NSW Murray Darling Basin Fractured Rock Groundwater Sources 2011 NSW State Groundwater Policy Framework Document (NOW) NSW State Groundwater Quality Protection Policy (NOW) NSW State Groundwater Quantity Management 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)
Groundwater	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) National Water Quality Management Strategy: Guidelines for Sewerage Systems – Use of Reclaimed Water (ARMCANZ/ANZECC)
Surface Water	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 on Waterfront Land (NRAR)
Flooding	Floodplain Development Manual (OEH) Floodplain Risk Management Guideline (OEH)
Biodiversity	Fisheries Management Act 1994 Biodiversity Conservation Act 2016

	Biodiversity Assessment Method (OEH)
	Biosecurity Act 2015
	NSW State Groundwater Dependent Ecosystem Policy (NOW)
	Risk Assessment Guidelines for Groundwater Dependent Ecosystems (DPI)
	Policy and Guidelines for Fish Habitat Conservation and Management (DPI)
Heritage	
	Aboriginal Cultural Heritage Consultation Requirements for Proponents (OEH)
	Code of Practice for Archaeological Investigations of Objects in NSW (OEH)
	Guide to investigating, assessing and reporting on aboriginal cultural heritage in NSW (OEH).
	NSW Heritage Manual (OEH)
Noise, Vibration and Blasting	
	Voluntary Land Acquisition and Mitigation Policy: For State Significant Mining, Petroleum and Extractive Industry Developments (DPE 2014)
	NSW Noise Policy for Industry (EPA)
	Interim Construction Noise Guideline (EPA)
	NSW Road Noise Policy (EPA)
	Rail Infrastructure Noise Guideline (EPA)
	Environmental Noise Management – Assessing Vibration: a technical guide (DEC)
	Technical Basis for Guidelines to Minimise Annoyance Due to Blasting Overpressure and Ground Vibration (ANZECC)
Air Quality	
	Voluntary Land Acquisition and Mitigation Policy: For State Significant Mining, Petroleum and Extractive Industry Developments (DPE 2014)
	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 (DEC)
	National Greenhouse Accounts Factors (Commonwealth)
	NSW Climate Change Policy Framework
Transport	
	Guide to Traffic Generating Developments (RTA)
	Road Design Guide (RMS) & relevant Austroads Standards
	Austroads Guide to Traffic Management Part 12: Traffic Impacts of Development and RMS Supplements
Socio-Economic	
	Social Impact Assessment Guideline for State Significant Mining, Petroleum Production and Extractive Industry Development (DPE 2017)
Hazards	
	Hazardous and Offensive Development Application Guidelines – Applying SEPP 33
	Hazardous Industry Planning Advisory Paper No. 6 – Guidelines for Hazard Analysis
Waste	
	Waste Classification Guidelines (EPA)
	Protection of the Environment Operations (Waste) Regulation 2014
	Environmental Guidelines: Solid Waste Landfills (EPA 2016)
	Tailings Management – Leading Practice Sustainable Development Program for the Mining Industry (Australian Government 2016)
Resource	

Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves 2012 (JORC)

Rehabilitation

Mine Rehabilitation – Leading Practice Sustainable Development Program for the Mining Industry (Commonwealth)

Mine Closure and Completion – Leading Practice Sustainable Development Program for the Mining Industry (Commonwealth)

Strategic Framework for Mine Closure (ANZMEC-MCA)

Environmental Planning Instruments

State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007

State Environmental Planning Policy (State and Regional Development) 2011

State Environmental Planning Policy (Infrastructure) 2007

State Environmental Planning Policy (Primary Production and Rural Development) 2019

State Environmental Planning Policy No. 33 – Hazardous and Offensive Development

State Environmental Planning Policy No. 55 – Remediation of Land

Broken Hill Local Environmental Plan 2013
