Environmental Assessment Requirements

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

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Application Number	SSD 9572
Proposal	 The Copi Mineral Sands Project, which includes: developing an open cut mineral sands mine and associated infrastructure; extracting and processing approximately 1.5 million tonnes of ore a year for up to 6 years; transporting the heavy mineral concentrate from the mine via road for further processing off-site; and progressively rehabilitating the site.
Location	Approximately 75 km northwest of Wentworth, in the Wentworth local government area
Applicant	Relentless Resources Limited
Date of Issue	27 September 2018
General Requirements	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> In particular, the EIS must include: • a stand-alone executive summary; • a full description of the development, including: - a summary of regional and local geology and soils; - the resource to be extracted, demonstrating efficient resource recovery within economic and environmental constraints; - the mine layout and scheduling; - minerals processing and transport arrangements; - 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 vater 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: - 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:

- 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
- 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 State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007); and
- the reasons why the development should be approved having regard to:
 - relevant matters for consideration under the Environmental Planning and Assessment Act 1979, 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.

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.

In addition to the matters set out in Schedule 1 of the *Environmental Planning* and Assessment Regulation 2000, 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 *Environmental Planning* and Assessment Regulation 2000), including details of all the assumptions and components from which the capital investment value calculation is derived.

Specific Issues

The EIS must address the following specific issues:

- Land including:
 - an assessment of 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;
 - 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 State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007, paying particular attention to the agricultural land use in the region;
- Water including:
 - an assessment of the likely impacts of the development on the quantity and quality of surface and groundwater resources (including, but not limited to, the Murray Basin region);
 - an assessment of the likely impacts of the development on aquifers, bores, watercourses, riparian land, water-related infrastructure, other water users, and groundwater dependent ecosystems;

- 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) or water source embargo; and
- an assessment of any likely flooding impacts of the development;

• Noise – including:

- an assessment of the likely operational noise impacts of the development (including construction noise) in accordance with the Noise Policy for Industry, and the Voluntary Land Acquisition and Mitigation Policy (2018);
- 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*; and
- an assessment of the likely road noise impacts of the development in accordance with the NSW Road Noise Policy;

• Air Quality – including:

- an assessment of the likely air quality impacts of the development, including cumulative impacts from nearby developments, 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;

• **Biodiversity** – including:

- an assessment of the likely biodiversity impacts of the development (including but not limited to the impacts on *Austrostipa nullanulla*, and Arid Shrublands vegetation class in the Riverina and Murray Darling Depression bioregions and Chenopod sub-formation), in accordance with the *Biodiversity Assessment Method* (BAM), and documented in a Biodiversity Development Assessment Report (BDAR); and
- a strategy to offset any residual impacts of the development in accordance with the offset rules under the *Biodiversity Offsets Scheme*;

• Heritage – including:

- an assessment of the potential impacts of the development on Aboriginal heritage (cultural and archaeological), including adequate consultation with relevant Aboriginal communities/parties and documentation of the views of these stakeholders regarding the likely impact of the development on their cultural heritage; and
- an assessment of the potential impacts on environmental heritage in accordance with the *NSW Heritage Manual*, including any heritage conservation areas and State and local historic heritage items within and near the site:

• Transport – including:

- an assessment of the likely transport impacts of the development on the capacity, condition, safety and efficiency of the road and rail networks, including undertaking a road safety audit; and
- a traffic analysis of any major/relevant intersections impacted, using SIDRA or a similar traffic model;
- Hazards including a detailed description of the management of concentrate and waste material and an assessment of the likely risks to public safety, paying particular attention to potential bushfire risks, and storage, 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 (overburden
 dumps, bunds, etc.), and minimising the lighting impacts of the development;

ATTACHMENT 1

Environmental Planning Instruments, Policies, Guidelines & Plans

Land	
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	The land and soil capability assessment scheme. Second approximation (OE11)
Water	Water Sharing Plan for the New South Wales Murray and Lower Darling Regulated
Water Sharing Plans	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
Groundwater	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)
	NSW State Rivers and Estuary Policy (NOW)
	NSW Government Water Quality and River Flow Objectives (EPA)
Surface Water	Using the ANZECC Guideline and Water Quality Objectives in NSW (EPA)
	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)
	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)
Noise and Vibration	
	Voluntary Land Acquisition and Mitigation Policy: For State Significant Mining,
	Petroleum and Extractive Industry Developments (DPE 2018)
	Noise Policy for Industry (EPA)
	Interim Construction Noise Guideline (EPA)
	NSW Road Noise Policy (EPA)
	Environmental Noise Management – Assessing Vibration: a technical guide (DEC)
Air Quality	
	Voluntary Land Acquisition and Mitigation Policy: For State Significant Mining, Petroleum and Extractive Industry Developments (DPE 2018)

	Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (EPA)
	Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (DEC)
	National Greenhouse Accounts Factors (Commonwealth)
Biodiversity	
,	Biodiversity Assessment Method (OEH)
	Threatened Species Assessment Guidelines - Assessment of Significance (OEH)
	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 (DECCW)
	Code of Practice for Archaeological Investigations of Objects in NSW (OEH)
	Guide to investigating, assessing and reporting on aboriginal cultural heritage in NSW (OEH)
	Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW (OEH)
	NSW Heritage Manual (OEH)
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
Hazards	
	Hazardous Industry Planning Advisory Paper No. 6 – Guidelines for Hazard Analysis
Socio-Economic	
	Social Impact Assessment Guideline: For State Significant Mining, Petroleum Production and Extractive Industry Development (DPE 2017)
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)
	Mine Rehabilitation – Leading Practice Sustainable Development Program for the Mining Industry (Commonwealth)
Environmental Plan	ning 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 (Rural Lands) 2008
	State Environmental Planning Policy (Rural Lands) 2008 State Environmental Planning Policy No. 55 – Remediation of Land