

Mr. Andrew Rode
Senior Environmental Assessment Officer
Energy & Resources
Department of Planning and Environment
GPO Box 39
Sydney NSW 2001

Dear Mr. Rode,

**Request for SEARs - Hawsons Iron Ore
SSD 5537**

Thank you for your correspondence via ePlanning portal (ref: PAE-955) on 30 October 2019, requesting Transport for NSW (TfNSW) provide input into the Secretary's Environmental Assessment Requirements (SEARs) for the Subject State Significant Development (SSD 5537).

The relevant documents have been reviewed and suggested additions and changes to the draft SEARs are provide in track changes in the attachment enclosed in this letter.

If you require clarification of the above, please do not hesitate to contact Billy Yung, Senior Transport Planner, via email at billy.yung@transport.nsw.gov.au.

Yours sincerely



12/11/2019

Mark Ozinga
Principal Manager, Land Use Planning & Development
Customer Strategy and Technology

Objective Reference: CD19/08722

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*

Application Number	SSD 5537
Proposal	The Hawsons Iron Project which includes: • developing an open cut magnetite mine and associated infrastructure, including a water supply pipeline; • 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 from South Australia; and • progressively rehabilitating the site.
Location	60 kilometres south-west of Broken Hill, in the unincorporated Western Division
Applicant	Carpentaria Resources Limited
Date of Issue	November 2019
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: - the resource to be extracted (size and quality), demonstrating efficient resource recovery within 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); - workforce requirements during all phases of the development (on a full-time equivalent basis); - surface disturbance footprint; - 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 list of any approvals that must be obtained before the development may commence; • an assessment of the potential 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 legislation, 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:

	- 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; • 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>); • a conclusion evaluating the merits of the development as a whole, having regard to the requirements in Section 4.15 of the Environmental Planning and Assessment Act 1979; and • a signed statement from the author of the EIS, certifying that the information contained within the document is neither false nor misleading. 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 <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.
Specific Issues	The EIS must address the following specific issues: • Land Resources – including: - 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: - an assessment of the likely impacts of the development on the quantity and quality of the region's surface and groundwater resources; - the measures which would be put in place to control sediment run-off and avoid erosion; - 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; - identification of any licensing requirements or other approvals under the <i>Water Act 1912</i> and/or <i>Water Management Act 2000</i>; - an assessment of the reliability of water supply;

	- 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 (including spill/leak management); • Biodiversity – including: - an assessment of the biodiversity values and the likely biodiversity impacts of the development in accordance with the NSW Biodiversity Conservation Act 2016, the Biodiversity Assessment Method (BAM) and documented in a Biodiversity Development Assessment Report (BDAR); and - the BDAR must document the application of the avoid, minimise and offset framework including assessing all direct, indirect and prescribed impacts in accordance with the BAM; • Heritage – including an assessment of the likely Aboriginal and historic heritage (cultural and archaeological) impacts of the development, including adequate consultation with relevant Aboriginal stakeholders; • Air Quality – including: - an assessment of the likely air quality impacts of the development in accordance with the <i>Approved Methods and Guidance for the Modelling and Assessment of Air Pollutants in NSW</i>, and having regard to the NSW Government's <i>Voluntary Land Acquisition and Mitigation Policy</i>; and - an assessment of the likely greenhouse gas impacts of the development; • Noise and Blasting – including: - an assessment of the likely construction, operational and off-site noise impacts of the development in accordance with the <i>Interim Construction Noise Guideline</i>, <i>NSW Industrial Noise Policy</i>, <i>NSW Road Noise Policy</i> and <i>Rail Infrastructure Noise Guideline</i> (as applicable), and having regard to the <i>Voluntary Land Acquisition and Mitigation Policy</i>; - 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); - <u>Detailed assessment of the impact of the project on the capacity, efficiency and safety of the road and rail networks during construction and operation. The assessment should include the contribution of mining inputs, having regard to the transportation of dangerous goods (explosives, fuel and chemicals) to be utilised during the construction and operational phases of the project.</u> - <u>Details of all traffic types and volumes likely to be generated during construction and operation, including a description of haul routes and details of vehicle types and likely arrival and departure times.</u> - <u>Details of the proposed access to the site from the road network, including intersection location, design and sight distance.</u> - <u>Plans of any proposed road upgrades, infrastructure works or new roads/intersections required for the development.</u> - <u>Any oversize and over-mass vehicles and loads for the construction, operation or decommissioning of the project should be identified.</u>
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	- <u>Details of train operating plans, including likely rail routes and destinations, train size and configuration, service frequency, anticipated train path requirements, expected ramp up periods and peak demand.</u> - <u>Demonstrate engagement with and confirmation from ARTC regarding train path availability and future network enhancements which may be required to support the proposed operations and maintain sufficient capacity for other rail network users over the life of the project.</u> - <u>A travel plan which identifies transport strategies for the movement of the employees to the site such as shuttle buses, given the road safety implications of the moving up to 60 km to site each day.</u> • Rehabilitation and Final Landform – including: - 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; - the proposed rehabilitation and mine closure strategies for the site having regard to the key principles in the <i>Strategic Framework for Mine Closure</i>, including rehabilitation objectives, methodology, monitoring programs, performance standards and proposed completion criteria; • 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; • Waste – including estimates of the quantity and nature of the waste streams that would be generated by the development (including tailings and course rejects) and any measures that would be implemented to minimise, manage or dispose of the waste streams; • Visual – including an assessment of the likely visual impacts of the development (before, during and post-mining) 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 • Social and economic – including: - an assessment of the potential social impacts of the development on the local and regional community generally in accordance with the <i>Social Impact Assessment Guidelines for State Significant Mining, Petroleum Production and Extractive Industry Development (2017)</i>, including the likely 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: - o the costs and benefits of the development; identifying whether the development as a whole would result in a net benefit to NSW, including consideration of fluctuation in commodity markets and exchange rates (refer to guideline in Appendix 1); and - o the demand on local infrastructure and services.
Consultation	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. 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.
Further consultation after 2 years	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.

ATTACHMENT 1

Environmental Planning Instruments, Policies, Guidelines & Plans

Land	
	Strategic Regional Land Use Policy: Guideline for Agricultural Impact Statements 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)
	Interim Protocol for Site Verification & Mapping of Biophysical Strategic Land (OEH)
	State Environmental Planning Policy No. 55 – Remediation of Land
	Australian and New Zealand Guidelines for the Assessment and Management of Contaminated Sites (ANZECC)
	Land Use Conflict Risk Assessment Guide (DPI)
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)
	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)
	Environmental Guidelines: Use of Effluent by Irrigation (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)

	Biodiversity Assessment Method (OEH)
	Fisheries NSW policies and guidelines
	Threatened Species Assessment Guidelines - Assessment of Significance (OEH)
	Guidance to assist a decision-maker to determine a serious and irreversible impact (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)
	Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW 2010 (DECCW)
	Code of Practice for Archaeological Investigations of Aboriginal Objects in NSW (OEH)
	Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW (OEH).
	NSW Heritage Manual (OEH)
	Assessing Significance for Historical Archaeological Sites and Relics 2009 (OEH)
	Statements of Heritage Impact (OEH)
	The Burra Charter (The Australia ICOMOS charter for places of cultural significance)
Air Quality	
	Voluntary Land Acquisition and Mitigation Policy: For State Significant Mining, Petroleum and Extractive Industry Developments (DPE 2014)
	Approved Methods for the Sampling and Analysis of Air Pollutants in NSW (EPA)
	Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (EPA)
	National Greenhouse Accounts Factors (Commonwealth)
Noise & 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)
	Assessing Vibration: a technical guide (DEC)
	Technical basis for guidelines to minimise annoyance due to blasting overpressure and ground vibration (ANZECC)
Transport	
	Guide to Traffic Generating Developments (RTA)
	Road Design Guide (RMS) & relevant Austroads Standards
	Future Transport Strategy 2056 and supporting plans
Hazards	
	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
	Planning for Bush Fire Protection 2006 (RFS)
Social and economic	
	Guidelines for the economic assessment of mining and coal seam gas proposals 2015 (NSW Government)
	Social impact assessment guideline for State significant mining, petroleum production and extractive industry development 2017 (DP&E)
Waste	
	Waste Classification Guidelines (EPA)
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 (State and Regional Development) 2011
State Environmental Planning Policy (Infrastructure) 2007
State Environmental Planning Policy (Rural Lands) 2008
State Environmental Planning Policy No. 44 – Koala Habitat Protection
State Environmental Planning Policy No. 55 – Remediation of Land
State Environmental Planning Policy No. 33 – Hazardous and Offensive Development
Broken Hill Local Environment Plan 2013

ATTACHMENT 2

AGENCY COMMENTS