

Section 3

Consultation, Issue Identification and Prioritisation

PREAMBLE

This section describes the consultation undertaken during the design and evaluation phase of the Proposal, as well as during the preparation of this Environmental Impact Statement.

This information, together with a review of relevant legislation, planning documents and environmental guidelines and a range of background environmental studies was used to develop a comprehensive list of all relevant environmental issues.

A review of the design of the Proposal and the components of the local environment was undertaken to identify risk sources and potential environmental impacts for each environmental issue. The assessed risk associated with each potential impact was used to determine the relative priority of each issue, which instructed the order of assessment and breadth of coverage within Section 4.

The risk rankings were initially applied following the adoption of standard control measures and then with all proposed control measures to establish the residual risk ranking.

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3.1 INTRODUCTION

In order to undertake a comprehensive assessment of the environmental impacts arising from the Proposal, appropriate emphasis needs to be placed on those issues likely to be of greatest significance to the local environment, neighbouring landowners and the local and broader community. To ensure this has occurred, a program of extensive community and government agency consultation and review of environmental planning documentation has been undertaken to identify relevant environmental issues and potential impacts. This was followed by an analysis of the risk posed by each potential impact in order to prioritise the assessment of the identified environmental issues within the *Environmental Impact Statement*.

3.2 CONSULTATION

3.2.1 Community Consultation

The following information describes the consultation undertaken between the Applicant and the local, surrounding and significant regional communities, in regards to the overall operations and the proposed interactions between the community and the Proposal. Consultation with the Aboriginal community is described in Section 4.2.5.

3.2.1.1 Neighbouring Landowners

The Applicant has engaged in discussions with the owner of the land on which the Project Site is sited. The land owner is aware of the Applicant's plans for the Proposal and has indicated that he would prefer to discuss the Proposal further following receipt of development consent, assuming that it is granted.

3.2.1.2 Community Consultative Committee

The Applicant has established a Community Consultative Committee, including the following:

- an independent chairperson;
- five community representatives; and
- three Company representatives.

The committee has met on the following occasions.

- 22 February 2013.
- 21 May 2013.
- 20 August 2013.
- 26 November 2013.
- 18 February 2014.

On each occasion, the Proposal was discussed and the minutes record no feedback from the community representatives in relation to the Applicant's current or proposed activities.

3.2.2 Government Agency Consultation

3.2.2.1 Introduction

Both formal and informal consultation was undertaken with a range of government agencies at State and local levels throughout the preparation of this document. The following subsections provide an overview of government agency consultation in formalised meetings and throughout the ongoing development of the Proposal.

3.2.2.2 Conceptual Project Development Plan Meeting

A Conceptual Project Development Plan Meeting was held with Division of Resources and Energy (DRE) (a division of the Department of Trade and Investment, Regional Infrastructure and Services) on 2 May 2013. At that meeting, the Applicant presented an overview of the exploration activities undertaken, the identified resources and the Proposal as it was then understood. As a result, DRE agreed to support the Proposal moving to the development application phase and advised the DP&E that formal government agency consultation could commence.

3.2.2.3 Planning Focus Meeting

A Background Paper was prepared and circulated to relevant government agencies in preparation for a Planning Focus Meeting which was held on site on 17 June 2013. During that meeting, an overview of the Proposal, as it was then understood, was presented and attendees from the following State and local government agencies inspected the Project Site and provided initial comments.

- Division of Resources and Energy (DRE).
- Environment Protection Authority (EPA).
- Roads and Maritime Services (RMS).
- Bogan Shire Council (Council).

The following government agencies were invited to attend the Planning Focus Meeting, but, for various reasons, were unable to participate in the on-site visit and meeting.

- Department of Planning and Infrastructure (DP&I) now Department of Planning and Environment (DP&E).
- NSW Office of Water (NOW).
- Office of Environment and Heritage (OEH).

Following the Project Site inspection, the attending government agencies present verbally outlined the issues from their perspectives that the *Environmental Impact Statement* should address. A number of these issues and others (including submissions by the government agencies who couldn't attend the Planning Focus Meeting) were subsequently provided to DP&E in writing to assist in the formulation of the Director-General's Requirements (DGRs)

for the Proposal. The DGRs and the included correspondence from OEH, RMS and DRE were provided to the Applicant on 25 September 2013. A full copy of the DGRs is reproduced in **Appendix 2** of this document. A range of other agencies provided their requirements directly to R.W. Corkery & Co Pty Limited (refer to Section 3.2.2.4) and a tabulated summary of these requirements, those raised in the DGRs, and the correspondence to DP&E or R.W. Corkery & Co Pty Limited provided by government agencies, and where each issue is addressed in the *Environmental Impact Statement* and accompanying documents, is presented in **Appendix 3**.

3.2.2.4 Individual Agency and Stakeholder Consultation

In addition to the agency consultation described previously, further individual consultation was undertaken with the following government agencies and service providers, as outlined within the consultation requirements described in the DGRs. Consultation with community groups is described in Section 3.2.1.

NSW Office of Water

The NSW Office of Water – Dubbo office, was contacted by phone on 1 October 2013 and briefed on the Proposal and the requirement to consult with NOW, as outlined within the DGRs. Further to the phone conversation, the *Background Paper* was provided to NOW to formulate the basis of NOW's response and to provide background information to the Proposal.

Formal correspondence was provided by NOW on 4 October 2013, submitting the issues that they would like to see addressed within the *Environmental Impact Statement*, with these issues summarised and incorporated into **Appendix 3**.

Department of Primary Industries

The NSW Department of Primary Industries (DPI) was formally consulted on 25 October 2013, requesting if the various divisions within the DPI had any specific issues relating to primary industries which should be addressed within the *Environmental Impact Statement*. A formal response was received on 20 November 2013 and the issues to be addressed have been summarised and included within **Appendix 3**.

Central West Catchment Management Authority

The Central West Catchment Management Authority (CW-CMA) was contacted on 25 October 2013, requesting if any specific issues were to be addressed within the *Environmental Impact Statement*. The CW-CMA provided a verbal response on 31 October 2013, requesting that the Catchment Action Plan 2006 – 2016 be addressed throughout the *Environmental Impact Statement*. No further issues were identified by CW-CMA.

3.2.2.5 Summary of Issues Identified

Table 3.1 presents an overview of the issues identified in written correspondence from the government agencies consulted.

Table 3.1
Key issues identified by Government Agencies

Issue	DP&E	NOW	OEH	DRE	EPA	RMS	DPI	CW-CMA	Council
Noise / Blasting / Vibration	✓				✓				
Air Quality / Greenhouse Gas	✓				✓				✓
Groundwater	✓	✓			✓			✓	✓
Surface Water / Erosion and Sediment Control	✓	✓			✓			✓	✓
Biodiversity	✓		✓					✓	
Aboriginal Heritage	✓		✓						
Traffic and Transportation	✓					✓			✓
Visual Amenity	✓								
Waste Management	✓								
Bush Fire Management	✓								✓
Hazardous Goods and Reagents	✓								
Non-Aboriginal Heritage	✓								
Soil Resources	✓								
Agricultural Impacts / Land Use	✓						✓		
Socio-Economic	✓								
Acid Rock Drainage	✓			✓	✓				✓
Rehabilitation and Final Land use	✓			✓					✓

3.3 RELEVANT LEGISLATION, PLANNING ISSUES, POLICIES AND GUIDELINES

3.3.1 Introduction

A range of Commonwealth and NSW Legislation, policies and guidelines apply to the Proposal. These documents were reviewed to identify any environmental aspects requiring consideration in the *Environmental Impact Statement*. In addition, the DGRs identified a number of guideline documents that would potentially be of assistance during the preparation of the *Environmental Impact Statement* (see **Appendix 2**). A brief summary of each relevant piece of legislation and planning instrument is provided in the following subsections. The application and relevance of planning instruments related to specific environmental issues have been addressed in Section 4 and / or the relevant specialist consultant assessments.

3.3.2 Legislation

3.3.2.1 Commonwealth Legislation

Native Title Act 1993

The *Native Title Act 1993* (NT Act) provides for the recognition and protection of native title rights and interests of Aboriginal and Torres Strait Islander peoples to land and waters according to their traditional laws and customs. It also establishes a mechanism to determine claims to native title. Native title rights and interests can only exist if they have not been extinguished by a prior valid grant of a right which is inconsistent with the continuation of native title rights and interests (such as the grant of freehold title).

A Native Title Claim was formally registered by the National Native Title Tribunal 12 April 2012 known as the Ngemba/Ngiyampaa People claim (Federal Court number: NSD415/12, NNTT number: NC12/1). In 2012, Straits sought legal advice as to whether previous land titles extinguished Native Title Rights. Advice received confirms that land areas relevant to the Avoca Tank Project, being Lot 10 and Lot 135, were both subject to the grant of Conditional Lease 1917/3, granted under the *Crown Lands Consolidation Act 1913*. As the conditional lease was granted prior to 1 January 1994, it will be either independently valid or validated by the *Native Title Act (NSW South Wales) 1994*. Native title will accordingly have been extinguished over Lot 10 and Lot 135 as a consequence of a ‘previous exclusive possession act’, being the grant of Conditional Lease 1917/3.

Environment Protection and Biodiversity Conservation Act 1999

The *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) covers ‘matters of national environmental significance’. Relevant matters of national environmental significance include:

- listed threatened species and ecological communities; and
- listed migratory species protected under international agreement.

‘Actions’ are defined under the EPBC Act to include projects and developments. Actions which would or would be likely to have significant impacts on matters of national environmental significance, or which might significantly impact on Commonwealth land, are ‘controlled actions’. The Minister for the Environment determines whether a proposed action is a controlled action for the purpose of the EPBC Act. The carrying out of controlled actions are prohibited, unless approved by the Minister.

As the Ecology Assessment completed by EnviroKey Pty Ltd (and included as **Appendix 6** of the EIS), confirmed that the Proposal would not adversely impact on any matter of national environmental significance, it is not required to be referred under the EPBC Act.

National Greenhouse and Energy Reporting Act 2007

The *National Greenhouse and Energy Reporting Act 2007* (NGER Act) was introduced in 2007 with the objective of underpinning the introduction of an emissions trading scheme, informing government policy formulation and enabling Australia to meet its international reporting obligations.

The Applicant's mining activities currently trigger the thresholds for reporting under the NGER Act. If approved, the proposed activities would simply be included in the Applicant's corporate reporting requirements.

Energy Efficiency Opportunities Act 2006

The *Energy Efficiency Opportunities Act 2006* aims to improve the identification and evaluation of energy efficiency opportunities by large, energy using corporations, and to encourage the implementation of cost effective energy efficiency opportunities.

Large energy using corporations are required to undertake an assessment of energy efficiency opportunities and to report publicly on the outcomes of that assessment. Every 5 years, those corporations must submit assessment plans with deadlines for action on the assessed opportunities.

The Applicant is not currently registered for the Energy Efficiency Opportunities program.

3.3.2.2 NSW Legislation

The key NSW legislation relating to the approvals, leases and licences required for the Proposal and their implications for the Proposal are as follows.

Environmental Planning and Assessment Act 1979

The *Environmental Planning and Assessment Act 1979* (EP&A Act) provides the framework for the assessment and approval of development in NSW and is administered by the DP&E.

The EP&A Act aims to protect and conserve the environment through ecologically sustainable development. This is achieved through managing development to conserve resources, including agricultural land, natural areas, forests, minerals, water, and towns with the purpose of promoting social and economic welfare of the community and an enhanced environment.

Development consent is required under the EP&A Act for the purposes identified under the relevant Local Environment Plan (see Section 3.3.5). In order to obtain development consent, the development application needs to be accompanied by an *Environmental Impact Statement* as the Proposal is "designated development" in accordance with the provisions of Schedule 3(1) of the *Environmental Planning and Assessment Regulation 2000*.

The Proposal is also recognised classified under Section 91 of the EP&A Act as "integrated development" as other approvals, in addition to development consent, are required.

Protection of the Environment Operations Act 1997

The *Protection of the Environment Operations Act 1997* (POEO Act) provides the framework for regulation and reduction of pollution and waste in NSW. The POEO Act is regulated by the Environment Protection Authority (EPA), which issues environment protection licences (EPLs) for wide-ranging scheduled activities, including mining for minerals, mineral processing and crushing, grinding or separating works.

The POEO Act also requires immediate reporting of pollution incidents which cause or threaten to cause material harm to the environment. All holders of EPLs are required to prepare, implement and regularly test *Pollution Incident Response Management Plans*.

As a result of discussions between the Applicant and the EPA on 17 June 2013, it was determined that a new EPL, or a modification to an existing EPL, would be required for the Proposal.

Water Management Act 2000

An objective of the *Water Management Act 2000* (WM Act) is the sustainable and integrated management of the State's water for the benefit of both present and future generations. The WM Act provides clear arrangements for controlling land-based activities that affect the quality and quantity of the State's water resources. It provides for four types of approval, namely:

- water use approval (Section 89) – which authorises the use of water at a particular location for a particular purpose, for up to 10 years;
- water management work approval (Section 90) – which authorises the construction and use of a specified water supply at a specified location;
- controlled activity approval (Section 91(2) – which authorises activities on or under waterfront land, i.e. within 40m of waterfront land; and
- aquifer interference activity approval (Section 91(3) – which authorises interference of an aquifer.

The Dictionary of the WM Act defines an aquifer interference activity as involving any of the following:

- “(a) the penetration of an aquifer,
- (b) the interference with water in an aquifer,
- (c) the obstruction of the flow of water in an aquifer,
- (d) the taking of water from an aquifer in the course of carrying out mining, or any other activity prescribed by the regulations,
- (e) the disposal of water taken from an aquifer as referred to in paragraph (d).”

For controlled activities and aquifer interference activities, the WM Act requires that the activities avoid or minimise their impact on the water resource and land degradation, and where possible the land must be rehabilitated.

The Project Site is within the areas of the following water sharing plans for groundwater and surface water respectively. These plans set the framework for managing groundwater and surface water within and surrounding the Project Site.

- *Water Sharing Plan for the NSW Murray-Darling Basin Fractured Rock Groundwater Sources 2012.*
- *Water Sharing Plan for the Macquarie Bogan Unregulated and Alluvial Water Sources 2012.*

The Applicant currently holds a Water Access Licences to use up to 913ML of surface water per annum from Burrendong Dam. That water is released from the dam and extracted from the Bogan River at pumping station located approximately 25km to the east of the Project Site.

An application will be made through NOW for Approval's under Sections 89, 90 and 91 of the WM Act to account for groundwater encountered within the groundwater system during extraction operations throughout the life of the Proposal.

National Parks and Wildlife Act 1974

The *National Parks and Wildlife Act 1974* (NP&W Act) aims to manage and conserve nature, objects, places and features that have ecological and cultural value. The NP&W Act is administered and enforced by the OEH.

Aboriginal places and objects are protected under the NP&W Act. The Director-General has a database of information and records regarding Aboriginal objects whose existence and location have been reported, known as the Aboriginal Heritage Information Management System.

No Aboriginal places or objects would be disturbed by the Proposal.

Threatened Species Conservation Act 1995

The *Threatened Species Conservation Act 1995* (TSC Act) aims to conserve biodiversity and promote ecologically sustainable development by preventing extinction and promoting recovery of threatened species, populations, ecological communities and their habitats. This is done through eliminating and managing threats to the survival or evolutionary development of species, populations, ecological communities, such as the impacts of development.

This Act has been considered in the Ecology Assessment, a summary of which is described in Section 4.3.

Mining Act 1992

The *Mining Act 1992* aims to encourage and facilitate the discovery and development of mineral resources in NSW. The *Mining Act 1992* provides the framework for exploration, development, operation and closure of mines, and provides for the management of exploration licences and mining leases to allow access to mineral resources.

Granting of a Mining Lease can only occur following Development Consent being granted under the EP&A Act. The Applicant has made a mining lease application to the Minister for Resources and Energy in accordance with the *Mining Act 1992*.

Mine Health and Safety Act 2004 / Work Health and Safety (Mines) Act 2013

The *Mine Health and Safety Act 2002* (MHS Act) is to be utilised as the current, applicable safety Act, until such time that the *Work Health and Safety (Mines) Act 2013* (WHS Act), assented on 1 July 2013, is enacted, following the finalisation and gazettal of the *Work Health and Safety (Mines) Regulation*. The MHS Act (and by virtue the proposed WHS Act) puts into place special provisions to control particular risks that may arise from the exploration or mining of minerals to secure and promote health, safety and welfare of people that work in such operations.

The MHS Act aims to ensure that effective provisions for emergencies are developed and maintained in mining operations and at related places.

The Applicant would apply for and secure all relevant approvals, under the appropriate legislation, before work can commence.

Heritage Act 1977

The *Heritage Act 1977* aims to promote and protect the State's heritage, by preventing harm to buildings, relics or places that are on the State Heritage Register.

Under the Heritage Act, approval is required to carry out development on land on which an item listed on the State Heritage Register is located or that is subject to an interim heritage order. A conservation management plan may be entered into with respect to conserving an item listed on the State Heritage Register.

No listed places or objects would be disturbed by the Proposal.

Noxious Weeds Act 1993

The objective of the *Noxious Weeds Act 1993* (Noxious Weeds Act) is to reduce the negative impacts of weeds on the environment by establishing mechanisms to prevent, eliminate or restrict the spread of new or significant weeds.

The Noxious Weeds Act aims to effectively manage widespread weeds through weed control orders, requiring occupiers to control noxious weeds on land and to prohibit the entry of noxious weeds into the NSW. This is enforced by inspectors appointed under the Noxious Weeds Act, who are granted wide powers of entry and inspection in relation to the control of noxious weeds.

One noxious weed species, namely the Bathurst Burr, has been identified within the Project Site.

Rural Fires Act 1997

The aims of the *Rural Fires Act 1997* (Rural Fires Act) are to prevent, mitigate and suppress bush and other fires in rural fire districts, to coordinate fire fighting, to protect persons from injury and death, and to limit property damage arising from fires.

An approval is not required under Section 100B of the Rural Fires Act as the Proposal is not situated on land designated as 'bush fire prone land'.

3.3.3 State Planning Policies

3.3.3.1 State Environmental Planning Policy (State and Regional Development) 2011

The Proposal does not meet the requirements for State Significant Development as it does not meet the capital investment value threshold of \$30 million identified in Clause 5 of the *State Environmental Planning Policy (State and Regional Development) 2011* (State and Regional Development SEPP). However, it is classified as "Regional Development" under Clause 3 of Schedule 4A of the EP&A Act. Clause 21 of Part 4 of the State and Regional Development SEPP identifies that a Joint Regional Planning Panel (the Panel) would be the consent authority for the Proposal.

Under operating procedures established by Clause 21(2) of the State and Regional Development SEPP, Council is required to assist the Panel through the management of the application receipt, advertising and exhibition stages of the Proposal.

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

The *State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007* (Mining SEPP) was gazetted on 17 February 2007 in recognition of the importance to NSW of mining, petroleum production and extractive industries.

The Mining SEPP specifies matters requiring consideration in the assessment of any mining, petroleum production and extractive industry development. **Table 3.2** presents a summary of the matters that the Minister or his/her delegate needs to consider when assessing a new or modified Proposal (Part 3 – Clauses 12 to 17 of the SEPP) and a reference to the section(s) in this *Environmental Impact Statement* where each relevant element of the SEPP is addressed.

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

Hazardous and offensive industries, and potentially hazardous and offensive industries, relate to industries that, without the implementation of appropriate impact minimisation measures, would (or potentially would) pose a significant risk in relation to the locality, to human health, life or property, or to the biophysical environment.

In accordance with SEPP 33, the hazardous materials to be held or used within the Project Site are required to be identified and classified in accordance with the risk screening method contained within the Appendix 4 of *Applying SEPP 33 January 2011* (DoP, 2011). Hazardous materials are defined within that document as substances falling within the classification of the *Australian Code for the Transportation of Dangerous Goods by Road and Rail* (Dangerous Goods Code) (Department of Infrastructure, Transport, Regional Development and Local Government, 2009).

The Applicant notes that the potentially hazardous goods that would be used or stored within the Project Site would include diesel and other hydrocarbons and explosives, which would be stored and used in accordance with a comprehensive *Hydrocarbon Management Plan*.

As the quantities of diesel and other hydrocarbons and explosives to be stored and used within the Project Site do not meet the thresholds identified in the SEPP, based upon *Applying SEPP 33* (DoP, 2011), a preliminary hazard analysis is not required for the Proposal.

3.3.3.4 State Environmental Planning Policy No. 44 – Koala Habitat Protection

State Environmental Planning Policy No. 44 – Koala Habitat Protection aims to encourage the proper conservation and management of Koala habitat. As the Bogan Local Government Area is not identified in Schedule 1 of the SEPP as an area in which potential habitat may exist this SEPP is not considered further.

Table 3.2
Application of the Mining SEPP

Page 1 of 3

Relevant SEPP Clause	Description	EIS Section
12AA: Significance of resource	1) In determining an application for consent for development for the purposes of mining, the consent authority must consider the significance of the resource that is the subject of the application, having regard to: (a) the economic benefits, both to the State and the region in which the development is proposed to be carried out, of developing the resource, and	2.11 4.15.4
	(b) any advice by the Director-General of the Department of Trade and Investment, Regional Infrastructure and Services as to the relative significance of the resource in comparison with other mineral resources across the State.	-
	2) The following matters are (without limitation) taken to be relevant for the purposes of subclause (1) (a): (a) employment generation, (b) expenditure, including capital investment, (c) the payment of royalties to the State.	2.11 4.15.4
	3) The Director-General of the Department of Trade and Investment, Regional Infrastructure and Services is, in providing advice under subclause (1) (b), to have regard to such matters as that Director-General considers relevant, including (without limitation): (a) the size, quality and availability of the resource that is the subject of the application, and	1.4.5
	(b) the proximity and access of the land to which the application relates to existing or proposed infrastructure, and	2.7
	(c) the relationship of the resource to any existing mine, and	1.4.3
	(d) whether other industries or projects are dependent on the development of the resource.	4.15.3 4.15.4
	4) In determining whether to grant consent to the proposed development, the significance of the resource is to be the consent authority's principal consideration under this Part.	-
	5) Accordingly, the weight to be given by the consent authority to any other matter for consideration under this Part is to be proportionate to the importance of that other matter in comparison with the significance of the resource.	-
	6) To avoid doubt, the obligations of a consent authority under this clause extend to any application to modify a development consent.	NA
12AB: Non-discretionary development standards for mining	1) The object of this clause is to identify development standards on particular matters relating to mining that, if complied with, prevents the consent authority from requiring more onerous standards for those matters (but that does not prevent the consent authority granting consent even though any such standard is not complied with).	-

Table 3.2 (Cont'd)
Application of the Mining SEPP

Page 2 of 3

Relevant SEPP Clause	Description	EIS Section
12AB: Non-discretionary development standards for mining (Cont'd)	2) The matters set out in this clause are identified as non-discretionary development standards for the purposes of section 79C (2) and (3) of the Act in relation to the carrying out of development for the purposes of mining. Note. The development standards do not prevent a consent authority from imposing conditions to regulate project-related noise, air quality, blasting or ground vibration impacts that are not the subject of the development standards.	-
	3) Cumulative noise level The development does not result in a cumulative amenity noise level greater than the acceptable noise levels, as determined in accordance with Table 2.1 of the Industrial Noise Policy, for residences that are private dwellings.	4.5.6
	4) Cumulative air quality level The development does not result in a cumulative annual average level greater than 30 µg/m ³ of PM10 for private dwellings.	4.8.6
	5) Airblast overpressure Airblast overpressure caused by the development does not exceed: (a) 120 dB (Lin Peak) at any time, and (b) 115 dB (Lin Peak) for more than 5% of the total number of blasts over any period of 12 months, measured at any private dwelling or sensitive receiver.	4.6.4
	6) Ground vibration Ground vibration caused by the development does not exceed: (a) 10 mm/sec (peak particle velocity) at any time, and (b) 5 mm/sec (peak particle velocity) for more than 5% of the total number of blasts over any period of 12 months, measured at any private dwelling or sensitive receiver.	4.6.4
	7) Aquifer interference Any interference with an aquifer caused by the development does not exceed the respective water table, water pressure and water quality requirements specified for item 1 in columns 2, 3 and 4 of Table 1 of the Aquifer Interference Policy for each relevant water source listed in column 1 of that Table. Note. The taking of water from all water sources must be authorised by way of licences or exemptions under the relevant water legislation.	4.6.4
	8) The Minister is to review a non-discretionary development standard under this clause if a government policy on which the standard is based is changed.	-
12: Compatibility with other land uses	Consideration is given to:	
	- the existing uses and approved uses of land in the vicinity of the development;	1.4.3 4.1.5.2
	- the potential impact on the preferred land uses (as considered by the consent authority) in the vicinity of the development; and	4
	- any ways in which the development may be incompatible with any of those existing, approved or preferred land uses.	3.3

Table 3.2 (Cont'd)
Application of the Mining SEPP

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Relevant SEPP Clause	Description	EIS Section
12: Compatibility with other land uses (Cont'd)	The respective public benefits of the development and the existing, approved or preferred land uses are evaluated and compared.	5
	Measures proposed to avoid or minimise any incompatibility are considered.	4
13: Compatibility with mining, petroleum production or extractive industry	Consideration is given to whether the development is likely to have a significant impact on current or future mining, petroleum production or extractive industry and ways in which the development may be incompatible.	1.4 5.4.3
	Measures taken by the Applicant to avoid or minimise any incompatibility are considered.	1.4
	The public benefits of the development and any existing or approved mining, petroleum production or extractive industry must be evaluated and compared.	5.4
14: Natural resource and environmental management	Consideration is given to ensuring that the development is undertaken in an environmentally responsible manner, including conditions to ensure: <ul style="list-style-type: none"> - impacts on significant water resources, including surface and groundwater resources, are avoided or minimised; 	4.4 4.7
	<ul style="list-style-type: none"> - impacts on threatened species and biodiversity are avoided or minimised; and 	4.3
	<ul style="list-style-type: none"> - greenhouse gas emissions are minimised and an assessment of the greenhouse gas emissions (including downstream emissions) of the development is provided. 	4.8.1
15: Resource recovery	The efficiency of resource recovery, including the reuse or recycling of material and minimisation of the creation of waste, is considered.	2
16: Transportation	The following transport-related issues are considered. <ul style="list-style-type: none"> - The transport of some or all of the materials from the site by means other than public road. 	2.7 2.14.3
	<ul style="list-style-type: none"> - Limitation of the number of truck movements that occur on roads within residential areas or roads near to schools. 	2.7 4.10.3
	<ul style="list-style-type: none"> - The preparation of a code of conduct for the transportation of materials on public roads. 	4.10.3
17: Rehabilitation	The rehabilitation of the land affected by the development is considered including: <ul style="list-style-type: none"> - the preparation of a plan that identifies the proposed end use and landform of the land once rehabilitated; 	2.13
	<ul style="list-style-type: none"> - the appropriate management of development generated waste; 	2.4
	<ul style="list-style-type: none"> - remediation of any soil contaminated by the development; and 	2.13.3
	<ul style="list-style-type: none"> - the steps to be taken to ensure that the state of the land does not jeopardize public safety, while being rehabilitated or at the completion of rehabilitation. 	2.13.3

3.3.3.5 State Environmental Planning Policy No. 55 – Remediation of Land

SEPP 55 requires that consent for any development cannot be granted unless the consent authority has considered whether the land is contaminated. Given the history of the Project Site is one of agricultural grazing and mineral exploration, neither of which is likely to result in contamination of the land, the Applicant is satisfied that no contaminated land occurs on the Project Site. SEPP 55 is not considered further in the *Environmental Impact Statement*.

3.3.3.6 State Environmental Planning Policy (Rural Lands) 2008

The aims of this SEPP, as considered relevant to the Proposal, are to:

- (a) *facilitate the orderly and economic use and development of rural lands for rural and related purposes;*
- (c) *implement measures designed to reduce land use conflicts;*
- (d) *identify State significant agricultural land for the purpose of ensuring the ongoing viability of agriculture on that land, having regard to social, economic and environmental considerations;*

Specifically, and as described in Clause 12, the SEPP aims to provide for the protection of agricultural land:

- i) *that is of State or regional agricultural significance, and*
- ii) *that may be subject to demand for uses that are not compatible with agriculture, and*
- iii) *if the protection will result in a public benefit.*

The Proposal is considered with respect to these aims.

- The land that would be affected by the Proposal has not been identified as State or regional significant agricultural land by Schedule 2 of the SEPP.
- The land in which the Proposal is situated is low productivity agricultural land (see Section 4.14).
- The Proposal would require a relatively small proportion of the agricultural land in the locality and, as demonstrated at numerous other mine sites where agricultural activities are undertaken concurrently within mining, would not be incompatible with continued agricultural land use on and surrounding the Project Site, should this be required in the future.
- The protection of the land that is the subject of the Proposal would not provide any public benefit. In fact, the employment and local economic stimulus that would be generated by the Proposal would be of far greater public benefit than the current grazing.

This SEPP is not considered further in the *Environmental Impact Statement*.

3.3.4 Regional Planning Issues

3.3.4.1 Regional Environmental Plans

There are no regional planning instruments relevant to the Proposal.

3.3.4.2 Regional Strategies

The *Central Western Catchment Management Authority (CW-CMA) – Catchment Action Plan 2006 – 2016* (CAP 2006 – 2016) represents a regional strategy document which should be considered in the planning and assessment of any development within the area managed by the CW-CMA. The CAP 2006 – 2016 is the strategic document that outlines the direction for actions within the catchment over the 10 year period 2006 to 2016. It sets the framework for this by specifying catchment and management targets that address key natural resource management issues in the catchment. **Table 3.3** provides the summary of these targets (as issued by the CW-CMA).

Table 3.3
CW- CMA Catchment Action Plan 2006 – 2016 Targets

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Themes	Catchment Targets	Programs	Management Targets
Land & Vegetation	CT1: Quality and quantity of vegetation managed to maintain and/or improve designated cover capable of preventing soil erosion (i.e. designated cover greater than or equal to 40%).	1. Sustainable Agriculture.	1. Sustainable agriculture management practice carries out by 50% of landholders by 2016.
		2. Landscape Management.	2. Maintain or rehabilitate one million hectares of native pasture vegetation communities by 2016.
		3. Pests.	3. No increase in the number of species, or extent of pest weeds or animals, above current levels and a reduction in the impact of pest species.
Rivers and Groundwater	CT2: The Surface Water System Health Index Rating and the Groundwater System Health Index Rating Improved at 60% of relevant monitoring sites and maintained at all other monitoring sites by 2016.	4. Aquatic Habitat.	4. Habitat improvement actions implemented on 20% of identified priority areas of stream floodplain, wetland and riparian areas by 2016.
		5. Water Quality and Salinity.	5. Water quality and salinity levels meeting ANZECC drinking water and recreational use criteria for greater than 95% of the time at key town use sites by 2016.
	CT3: Salinity in the Barwon-Darling at Wilcannia less than 800EC for 80% of the time as measured on a daily basis and less than 350EC for 50% of the time by the year 2016.	6. Surface Water Management.	6. Flow sharing arrangements including water sharing plans implemented by DNR for all priority streams by 2010, with advice from the CW-CMA on water management issues which affect the catchment community.
		7. Groundwater Management.	7. Water pressure stabilised in key regions of the Great Artesian Basin, as defined by NSW Great Artesian Basin Advisory Committee, by 2016.

Table 3.3 (Cont'd)
Central Western CMA CAP 2006 – 2016 Targets

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Themes	Catchment Targets	Programs	Management Targets
Biodiversity	CT4a: Ecological communities of high conservation value are adequately protected.	8. High Conservation Value Areas.	8. Ecological communities of high conservation value (including threatened species) are identified within three years of Plan approval and adequately protected throughout the catchment by negotiation with landholders, within eight years of Plan approval.
		9. Conservation Land Use.	9. An ongoing program is established that allows landholders to incorporate lands managed for conservation as an alternative land use and part of a viable enterprise, within two years of Plan approval.
Community	CT4b: In each of the other ecological communities 12% of the area will be managed for conservation within 10 years of Plan approval and 25% within 25 years of Plan approval.	10. Cultural Heritage.	10. Establish an Indigenous Natural Resource and Cultural Reference Group, within two years of Plan approval to formally coordinate the input of Aboriginal communities into natural resource management planning activities in the Western Catchment.
			11. Develop and assist the implementation of a process for the documentation, evaluation and ownership of indigenous knowledge of sustainable land management and cultural values in the Western Catchment by 2009.
		11. Community Education.	12. There is a continual increase in land managers' awareness, knowledge and skills in NRM and adoption of practices which improve natural resource outcomes.
			13. Land managers and other natural resource managers are actively engaged in collaborative action to improve the management of natural resources through the development and implementation of regionally relevant NRM.
			14. There is a continual increase in the willingness of land managers, other stakeholders and the community to partner NRM organisations to deliver natural resource outcomes.
		12. Monitoring and Evaluation	Monitoring, evaluation and reporting strategy to be developed.

Source: Western CMA CAP 2006 – 2016, p. 140.

In early 2014, Catchment Management Authorities in NSW were incorporated into a new entity, namely Local Land Services (LLS) within the Department of Primary Industries. As a result, the Central Western Catchment Management Authority functions are to be exercised by the Central West Local Land Services. In January 2014, the *Central Western Transitional Catchment Action Plan*, drawn principally from the *CW-CMA Catchment Action Plan 2006 - 2016* was prepared for the Central West LLS region. The region covers 94,000km² and comprises the local government areas of Bogan, Coonamble, Dubbo, Forbes, Gilgandra, Lachlan, Narromine, Parkes, Warren, Warrumbungle, Weddin and Wellington. **Table 3.4** identifies relevant goals, strategies, actions and targets identified in the *Central Western Transitional Catchment Action Plan*.

3.3.5 Local Planning Issues

The Applicant notes that the Project Site is situated within land zoned as Zone RU1 - Primary Production under the *Bogan Local Environment Plan 2011* (Bogan LEP). The objectives of Zone RU1 – Primary Production under that plan are as follows.

- “To encourage sustainable primary industry production by maintaining and enhancing the natural resource base.
- To encourage diversity in primary industry enterprises and systems appropriate for the area.
- To minimise the fragmentation and alienation of resource lands.
- To minimise conflict between land uses within this zone and land uses within adjoining zones.”

It is noted that underground mining is not identified as permissible with consent within this zone. However, Clause 70(1)(b) of the Mining SEPP identifies that mining is permissible, with consent, on any land where agriculture is permissible. As agriculture is permissible under Zone RU1 under the Bogan LEP, underground mining is also permissible, with consent.

It is also identified that the Project Site is situated in an area zoned as “Moderate Biodiversity Sensitivity” under the Bogan LEP. Clause 7.4 of the Bogan LEP identifies that the objective of the LEP in relation to such land is to maintain terrestrial biodiversity by:

- “protecting native fauna and flora; and
- protecting the ecological processes necessary for their continued existence; and
- encouraging the conservation and recovery of native fauna and flora and their habitats.”

In determining any application for development consent, the consent authority must consider whether or not the development:

- “is likely to have any adverse impact on the condition, ecological value and significance of the fauna and flora on the land;
- is likely to have any adverse impact on the importance of the vegetation on the land to the habitat and survival of native fauna;
- has any potential to fragment, disturb or diminish the biodiversity structure, function and composition of the land; and
- is likely to have any adverse impact on the habitat elements providing connectivity on the land.”

Table 3.4
Central Western Transitional CAP

Goal	Strategy	Actions	Targets
ENVIRONMENT G3 To improve and maintain the condition of the natural environment.	S7 To improve the extent, condition and connectivity of native vegetation	<p>A7.1 Recreate and enhance connectivity for native species.</p> <p>A7.2 Maintain and increase extent and condition of native grasslands.</p> <p>A7.3 Manage hydrologic regime for semi-arid grassy woodland.</p> <p>A7.4 Increase and maintain area of native woody vegetation to above 30% threshold with at least 15% within the comprehensive, adequate and representative requirements of each bioregion.</p> <p>A7.5 Improve and/or maintain extent and condition of remnant and larger vegetation patches.</p> <p>A7.6 Reduce impacts of key threatening processes on threatened species through the implementation of recovery action plans.</p> <p>A7.7 Reduce the impact of Invasive Native Scrub (INS) on production and biodiversity.</p> <p>A7.8 Reinstate natural fire regimes for dry sclerophyll forest and semi-arid grassy/shrubby woodland.</p> <p>A7.9 Shrub thinning and increase surface roughness for semi arid shrubby woodland.</p>	T7 By 2023, 8-16% of priority vegetation communities are being actively managed to achieve a good condition stable state, increase net extent and, where possible, increase connectivity.
	S8 To improve the stability, condition and connectivity of water assets	<p>A8.1 Improve connectivity of water flow.</p> <p>A8.2 Encourage best management practice to manage threatening processes on water ways and aquatic ecosystems (invasive species, pollution, cold water pollution, barriers etc.).</p> <p>A8.3 Improve water use, reuse and recycling.</p> <p>A8.4 Priority GDEs and ground water sources identified and resilience analysis complete.</p> <p>A8.5 Rehabilitate / enhance riparian and floodplain habitat for recovery of priority reaches and conservation reaches (foster healthy populations of aquatic species, bed, bank, vegetation etc.).</p>	T8 By 2023, 1-5% of priority river reaches and 10-35% of priority wetlands are actively managed to maintain a good condition stable state.

Source: *Central Western Transitional Catchment Action Plan – After Table 1.*

A detailed Ecology Assessment has been prepared by EnviroKey (2014) and is presented in **Appendix 6**. A summary of that assessment is presented in Section 4.3.

3.3.6 Environmental Guidelines

The DGRs require that in assessing the identified key assessment requirements, reference be made to one or more guideline documents. In addition, a number of the government agencies consulted in relation to the Proposal required reference to other environment guideline documents. **Appendix 3** identifies each of the relevant guidelines and identifies the relevant section(s) of the *Environmental Impact Statement* and/or part of the *Specialist Consultant Studies Compendium* where they are considered and/or addressed.

3.4 ANALYSIS OF ENVIRONMENTAL RISK AND ISSUE PRIORITISATION

Risk is the chance of something happening that will have an impact upon the objectives of a task. In the present case, the relevant objective is the construction and operation of the Avoca Tank Project with minimal adverse impacts on the surrounding environment.

Risk is measured in terms of consequence (severity) and the likelihood (probability) of the event happening. In order to analyse the environmental risks associated with the Proposal, a structured analysis of risk involving the following individuals was undertaken by teleconference on 31 October 2013.

- Mr Simon Fitzgerald, former General Manager – Projects, Straits Resources Limited.
- Mr Greg Stephenson, former Senior Environmental Advisor, Tritton Mines.
- Mr Mitchell Bland, Principal Environmental Consultant with R.W. Corkery & Co. Pty Limited.

The group discussed and agreed upon:

- each of the likely risk sources;
- their potential consequences;
- the likely receptors / surrounding environment;
- potential environmental impacts; and
- how they could be mitigated or managed to reduce the level of impact(s).

The assessment of risk was firstly established based upon the adoption of the controls and mitigation measures that are standard throughout the mining industry. This level of risk was referred to as the risk with standard control measures. It was recognised that where it would be necessary to reduce the potential impacts beyond that achieved with standard control measures to a level considered both achievable and worthwhile, further controls or mitigation measures would need to be adopted. This level of impact after the adoption of the additional controls was referred to as residual risk. In some cases, it was accepted that the standard controls and

mitigation measures would be adequate to achieve an acceptable level of impact without the need for any additional controls or mitigation measures or that the risk was already as low as reasonably practical.

Each risk source was allocated a ranking based on the potential consequences and likelihood of occurrence and in accordance with Australian Standards HB 203:2006 and AS/NZS 4360:2004. The risk analysis considers the Proposal first with the adoption of standard control measures initially and then with all proposed control measures in order to evaluate the impact of the Proposal.

3.5 PRIORITISATION OF KEY ENVIRONMENTAL ISSUES

The prioritisation of the key environmental issues as a result of the risk analysis, and hence their general order of presentation in this document, has been established through reference to the following.

- The results of the issue consultation process recorded in Section 3.2.
- The results of the review of relevant legislation, planning issues, policies and guidelines presented in Section 3.3.
- The approach to the risk analysis outlined in Section 3.4 and documented further in Section 5.2.
- The experience of the document's author in assembling *Environmental Impact Statements*.

The key environmental issues are presented in Section 4 in the following order.

- | | |
|----------------------------|--------------------------------|
| 1. Aboriginal Heritage. | 8. Surface Water. |
| 2. Ecology. | 9. Traffic and Transportation. |
| 3. Groundwater. | 10. Visual Amenity. |
| 4. Noise. | 11. Bush Fire Management. |
| 5. Blasting and Vibration. | 12. Soil and Land Capability. |
| 6. Historic Heritage. | 13. Agricultural Resources. |
| 7. Air Quality. | 14. Socio-Economic. |

It is noted that the positioning of the agricultural and socio-economic assessments within the above order is not a direct consequence of the prioritisation assessment. Rather, from the assessment of the risk sources, potential consequences and nature of the existing environment, it was apparent that the majority of other environmental issues identified included actual or perceived social or socio-economic risks and, as such, it was appropriate that socio-economic issues be addressed following the discussion of the contributing issues.