

# 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.*

---

---

This page has intentionally been left blank

## **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 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**

#### **3.2.1.1 Introduction**

The Applicant notes that community interest within the Broken Hill community in activities at the North Mine is high. Given the anticipated level of public interest, and to ensure a consistent approach, stakeholder consultation has been undertaken in accordance with the Applicant's standard consultation practices. In summary, this has included the following.

- Briefings provided to the Applicant's workforce at quarterly communications meetings.
- Information presented in the Applicant's newsletter, The Perilya Post.
- Information provided via local media outlets.
- Briefings provided to the wider community.

#### **3.2.1.2 Workforce Briefings**

Perilya undertakes briefings with its workforce approximately quarterly. The proposed reopening of the North Mine was an item for discussion at meetings held during October 2015 and February 2016, April 2016, July 2016 and October 2016. In each case, the Applicant presented an overview of the proposed activities, as they were understood on the day of the briefing. The workforce was provided with an opportunity to ask questions at the end of the briefing or later by a direct approach to senior management.

Feedback from the Company's workforce was invariably related to timing of the commencement of the proposed activities, transitioning of the workforce from the existing operations to the North Mine and the life of the Mine. No other matters relevant to this *Environmental Impact Statement* have been raised by the workforce.

#### **3.2.1.3 The Perilya Post**

The Applicant publishes the Perilya Post, a regular employment standards and information newsletter. The proposed reopening of the North Mine was discussed in the April 2016 and November 2016 editions of the Perilya Post. The April 2016 edition described the overview of

the Proposal and an update of the status of the Proposal. The November 2016 edition presented a status update of the Proposal. The Applicant did not receive any comments or requests for additional information associated with the publication of that information.

#### 3.2.1.4 Media Interviews and Briefings

The Applicant has provided interviews and briefings to the media as follows.

- Barrier Daily Truth, published:
  - 12 May 2015;
  - 7 January 2016;
  - 23 March 2016;
  - 19 October 2016;
  - 16 December 2016; and
  - 22 December 2016.
- ABC Radio, interview dated:
  - 22 February 2016;
  - 27 July 2016; and
  - 16 December 2016.

#### 3.2.1.5 Community Briefings

The Applicant held a community briefing at “Thyme on Argent” on 15 December 2016. The meeting was advertised in the Barrier Daily Truth for the eight days (seven editions) that preceded the meeting. The meeting was also advertised widely in the local media and was attended by more than 50 community members.

Mr Bruce Byrne, General Manager Perilya Broken Hill, spoke for more than 1 hour and presented a detailed outline of the Proposal. The presentation included detailed descriptions of the following.

- The historical context of the North Mine, the Applicant’s current operations and the Proposal.
- The proposed life of mine planning for each of the Applicant’s operations, with emphasis placed upon the reasoning behind the 2016 adjustments to the Southern Operations production and employment levels and consequent extension of the life of the Mine from 2024 to 2030. In particular, Mr Byrne emphasised the interdependency of each operation on the other operations.
- The proposed activities, with particular emphasis on the proposed transportation operations.

Attendees were provided with an opportunity to ask questions or raise issues both formally during the presentation and informally afterwards. The majority of questions and comments related to the timing for the commencement of operations and that transitioning of employees from the Applicant's existing operations to the North Mine. Matters raised that are relevant to this application include the following.

- Lead – one attendee raised the issue of lead emissions and whether these were to be addressed in the *Environmental Impact Statement*. It was explained that both an Air Quality assessment and a Health Impact Assessment were being finalised but that preliminary results indicated that the anticipated impacts were expected to be negligible.
- Visual Amenity – two attendees, representing Outback Astronomy, raised the issue of visual amenity impacts, particularly at night. Outback Astronomy operates a tourist business showing visitors to Broken Hill the night sky. The business is located at the former Rural Flying Doctor Base on the Barrier Highway, approximately 6km to the northeast of the Mine Site. The Applicant highlighted that the night-time visual amenity impacts would be likely to be similar to those associated with the existing Potosi Mine, located closer to the former Rural Flying Doctor Base than the Mine Site. The attendees noted that the impacts from that operation were not significant. Notwithstanding this, the Applicant committed to assess potential night-time visual amenity impacts (see Section 4.11.5) and to continue to liaise with the business.

### 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 Preliminary Environmental Assessment and Project Briefings

A *Preliminary Environmental Assessment* dated February 2016 describing the Proposal was circulated to the Department of Planning and Environment on 19 February 2016. Following submission, a meeting was held in the offices of the NSW Department of Planning and Environment on 14 March 2016 to provide the Department with a briefing in relation to the Proposal. That meeting was attended by senior Departmental officers, Mr Hender representing the Applicant and Mr Bland representing RWC. The Departmental officers were provided with an opportunity to seek clarification on a range of matters. Following the meeting, it was agreed that a formal Planning Focus Meeting was not required.

Notwithstanding the agreement that a Planning Focus Meeting was not required, a range of meetings during which the Proposal was discussed were held with individual agencies as follows.

- Broken Hill City Council.
- Division of Resources and Energy.
- Environment Protection Authority.

The Applicant held further meetings with NSW Trade and Investment on 26 May 2015 and 1 July 2015 to discuss the Proposal.

### 3.2.2.3 Secretary's Environmental Assessment Requirements

Based on the information provided in the Preliminary Environmental Assessment, Secretary's Environmental Assessment Requirements (SEARs) were issued for the Proposal on 6 May 2016. A copy of the SEARs are presented in **Appendix 1**, and **Appendix 2** presents a summary of SEARs and Environmental Assessment Requirements provided by agencies other than the Department of Planning and Environment, and where each issue has been addresses in this document.

### 3.2.2.4 Broken Hill City Council

The Applicant held an initial meeting with representatives of Council on 2 September 2015 to discuss the Proposal. A further meeting regarding the approvals required was held on 4 November 2015. A third meeting was held regarding the development application process was held on 14 January 2016.

Finally, the Applicant met with Council staff and Councillors on 8 December 2016 to provide an update on the Project similar to that described in Section 3.2.1.5. The Proposal was well received by the Councillors, with extensive discussion in relation to the timing and importance of the Proposal for the City of Broken Hill. The Councillors expressed strong support for the Proposal.

## 3.3 PLANNING CONTEXT

### 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*. 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 Commonwealth Legislation

The key Commonwealth legislation relating to the Proposal is as follows the *Environment Protection and Biodiversity Conservation Act 1999*. The Act covers 'matters of national environmental significance,' including:

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

‘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.

This Act has been considered in Section 4.9. In summary, there are no listed threatened or migratory species or ecological communities that would be impacted by the Proposal. The “City of Broken Hill” has been listed on the National Heritage List under the Act. However, the Proposal would not result in a significant impact on any matters relevant to that listing.

### 3.3.3 NSW Legislation

The key NSW legislation relating to the approvals, leases and licences required for the Proposal and their implications for the Proposal is 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 Department of Planning and Environment.

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). The Proposal is classified as State Significant Development in accordance with Paragraph 5 of Schedule 1 of *State Environmental Planning Policy (State and Regional Development) 2011* (State and Regional Development SEPP) as it would have a capital investment value of more than \$30 million. Approval is required in accordance with Division 4.1 of the *Environmental Planning and Assessment Act 1979* (EP&A Act). The approval authority is the Minister for Planning and Environment or their delegate. An EIS is required to be submitted to support the application and this document has been prepared in satisfaction of that requirement.

#### **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*.

The Applicant holds EPL2683 for the North Mine and Potosi. That licence permits “mining for minerals” and “crushing, grinding and separating” up to 500 000tpa. The Applicant anticipates that minor amendments to that licence will be required to facilitate 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 Proposal would result in aquifer interference as defined by the Act. However, the Applicant holds water supply Work Approval 60WA583325 for the North Mine. A consolidated Water Access Licence (WAL40959), including 60WA583325, was granted by DPI-Water on 17 November 2016. That Licence permits extraction of 1 466ML per year across each of the Applicant’s operations.

This Act has been considered in Section 4.7 and Section 4.8.

### 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 Office of Environment and Heritage.



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.

This Act has been considered in Section 4.10. In summary, the Proposal would not result in impacts to any known Aboriginal objects or places.

### **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 Section 4.9. In summary, the Proposal would not result in significant impacts to any listed species, population or ecological community.

### **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.

This Act has been considered in Section 4.6. In summary, a range of items within the Mine Site have been identified as having heritage significance. The Proposal would not result in significant impacts to any identified item of heritage significance within the Mine Site.

### **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.

This Act has been considered in Section 4.9. One noxious weed species, namely Green Cestrum, has been identified with the Mine Site.

### 3.3.4 NSW Planning Issues

The following six State Environmental Planning Policies (SEPPs) are relevant to the Proposal.

- *SEPP (State and Regional Development) 2011.*
- *SEPP (Mining, Petroleum Production and Extractive Industries) 2007.*
- *SEPP (Infrastructure) 2007.*
- *SEPP 33 – Hazardous and Offensive Development.*
- *SEPP 44 – Koala Habitat Protection.*
- *SEPP 55 – Remediation of Land.*

#### **State Environmental Planning Policy (State and Regional Development) 2011**

This *State Environmental Planning Policy (SEPP)* was gazetted on 28 September 2011 and applies to all projects satisfying nominated criteria made following that date. One of the purposes of this SEPP is to define those developments of State significance and therefore requiring Ministerial approval under the provisions of the EP&A Act. This SEPP, and Part 4 – Division 4.1 of the EP&A Act, is a system introduced to specifically deal with major projects.

As the capital investment value of the Proposal would be in excess of the identified threshold of \$30 million, the Proposal is identified under Schedule 1 of the SEPP and hence is designated as State Significant Development to which Part 4, Division 4.1 of the EP&A Act applies.

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

This SEPP was gazetted on 17 February 2007 in recognition of the importance to NSW of mining, petroleum production and extractive industries.

The SEPP specifies matters requiring consideration in the assessment of any mining, petroleum production and extractive industry development as defined in NSW legislation. **Table 3.1** presents a summary of the matters that the Minister or his/her delegate needs to consider when assessing a new or modified Proposal and a reference to the section(s) in this *Environmental Impact Statement* where each relevant element of the SEPP is addressed.

#### **State Environmental Planning Policy (Infrastructure) 2007**

The *State Environmental Planning Policy (Infrastructure) 2007* (Infrastructure SEPP) identifies, amongst other things, the matters to be considered in the assessment of development adjacent to particular types of infrastructure.

#### Rail Infrastructure

Clause 85(1) of the Infrastructure SEPP states the following.

“This clause applies to development on land that is in or immediately adjacent to a rail corridor, if the development:

- a) is likely to have an adverse effect on rail safety ...”

The Applicant notes that the Broken Hill – Parkes Railway occurs immediately to the west of the Mine Site, separated by the Menindee Road (**Figure 1.2**). The Proposal would not result in adverse safety-related risks to that rail corridor. As a result, this clause does not apply.

**Table 3.1**  
**Application of SEPP (Mining, Petroleum Production and Extractive Industries) 2007**

Relevant SEPP Clause	Description	EIS Section
12: Compatibility with other land uses	Consideration is given to: <ul style="list-style-type: none"> <li>the existing uses and approved uses of land in the vicinity of the development;</li> </ul>	4.1.4.2 and Figure 4.5
	<ul style="list-style-type: none"> <li>the potential impact on the preferred land uses (as considered by the consent authority) in the vicinity of the development; and</li> <li>any ways in which the development may be incompatible with any of those existing, approved or preferred land uses.</li> </ul>	Throughout Section 4
	The respective public benefits of the development and the existing, approved or preferred land uses are evaluated and compared.	4.15.4
	Measures proposed to avoid or minimise any incompatibility are considered.	Throughout Section 4 and Appendix 3
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.	1.5.3.4
	Measures taken by the Applicant to avoid or minimise any incompatibility are considered.	1.5.3.4
	The public benefits of the development and any existing or approved mining, petroleum production or extractive industry must be evaluated and compared.	4.15.4
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"> <li>impacts on significant water resources, including surface and groundwater resources, are avoided or minimised;</li> </ul>	4.7.4 and 4.8.3
	<ul style="list-style-type: none"> <li>impacts on threatened species and biodiversity are avoided or minimised; and</li> </ul>	4.9.7
	<ul style="list-style-type: none"> <li>greenhouse gas emissions are minimised and an assessment of the greenhouse gas emissions (including downstream emissions) of the development is provided.</li> </ul>	4.2.7.3
15: Resource recovery	The efficiency of resource recovery, including the reuse or recycling of material and minimisation of the creation of waste, is considered.	2.14
16: Transportation	The following transport-related issues are considered. <ul style="list-style-type: none"> <li>The transport of some or all of the materials from the Mine Site by means other than public road.</li> </ul>	2.14.6
	<ul style="list-style-type: none"> <li>Limitation of the number of truck movements that occur on roads within residential areas or roads near to schools.</li> </ul>	2.14.5
	<ul style="list-style-type: none"> <li>The preparation of a code of conduct for the transportation of materials on public roads.</li> </ul>	4.5.4
17: Rehabilitation	The rehabilitation of the land affected by the development is considered including: <ul style="list-style-type: none"> <li>the preparation of a plan that identifies the proposed end use and landform of the land once rehabilitated;</li> </ul>	Figure 2.15
	<ul style="list-style-type: none"> <li>the appropriate management of development generated waste;</li> </ul>	2.6 and 2.6
	<ul style="list-style-type: none"> <li>remediation of any soil contaminated by the development; and</li> </ul>	2.13.3 and 2.13.6
	<ul style="list-style-type: none"> <li>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.</li> </ul>	2.13.2 and 2.13.3

Road Infrastructure

Clause 101(2) of the Infrastructure SEPP states the following.

“The consent authority must not grant consent to development on land that has a frontage to a classified road unless it is satisfied that:

- b) where practicable, vehicular access to the land is provided by a road other than the classified road, and
- c) the safety, efficiency and ongoing operation of the classified road will not be adversely affected by the development as a result of:
  - i) the design of the vehicular access to the land, or
  - ii) the emission of smoke or dust from the development, or
  - iii) the nature, volume or frequency of vehicles using the classified road to gain access to the land, and
- d) the development is of a type that is not sensitive to traffic noise or vehicle emissions, or is appropriately located and designed, or includes measures, to ameliorate potential traffic noise or vehicle emissions within the site of the development arising from the adjacent classified road.”

The Applicant notes that the access to the Mine Site from the Barrier Highway would be via the existing Site Access Road. In addition, the traffic and transportation assessment undertaken by Tonkin and summarised in Section 4.5 identifies that the safety, efficiency and ongoing operation of the Highway would not be adversely affected by the Proposal. Finally, the Applicant notes that the proposed mining operations are not sensitive to road-traffic noise emanating from the Highway.

### **State Environmental Planning Policy No. 33 – Hazardous and Offensive Development (SEPP 33)**

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.

The hazardous substances and dangerous goods to be held or used on the Site are required to be identified and classified in accordance with the risk screening method contained within the document entitled *Applying SEPP 33 Final* (DP&I, 2011). Hazardous materials are defined within (DP&I, 2011) as substances falling within the classification of the *Australian Code for Transportation of Dangerous Goods by Road and Rail* (Dangerous Goods Code), (National Transport Commission, 2011).

As the Proposal would not result in storage of hazardous materials in quantities that would approach the relevant thresholds, this SEPP is not relevant to the consideration of the Proposal and is not discussed further in this document.

### **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 Broken Hill Local Government Area is not identified in Schedule 1 of the SEPP as an area in which potential habitat may exist, SEPP 44 is not relevant to the consideration of the Proposal and is not discussed further in this document.

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

SEPP 55 aims to promote the remediation of contaminated land for the purpose of reducing the risk of harm to human health or any other aspect of the environment. In particular, this policy requires consideration of whether or not a development requires consent for remediation works and requires that remediation works meet certain standards and notification requirements.

As a result of past mining operations since 1883, it is likely that sections of the Mine Site are contaminated. Clause 7(1) of the SEPP states the following.

“A consent authority must not consent to the carrying out of any development on land unless:

- a) it has considered whether the land is contaminated, and
- b) if the land is contaminated, it is satisfied that the land is suitable in its contaminated state (or will be suitable, after remediation) for the purpose for which the development is proposed to be carried out, and
- c) if the land requires remediation to be made suitable for the purpose for which the development is proposed to be carried out, it is satisfied that the land will be remediated before the land is used for that purpose.”

The Applicant notes that the land, in its current state, is suitable for the proposed use, namely for mining operations. Furthermore, as the proposed use is consistent with the existing use of the land, Subclauses 7(2) to 7(4) do not apply to the Proposal.

### 3.3.5 Local Planning Issues

**Figure 1.2** presents land zoning within the Mine Site under the *Broken Hill local Environment Plan 2013* (Broken Hill LEP). In summary, the Mine Site includes land zoned as follows.

#### SP1 – Mining

The objectives of this zone are as follows.

- *To provide for special land uses that are not provided for in other zones.*
- *To provide for sites with special natural characteristics that are not provided for in other zones.*
- *To facilitate development that is in keeping with the special characteristics of the site or its existing or intended special use, and that minimises any adverse impacts on surrounding land.*

Land Zoning Map – Sheet LZN\_005 under the Broken Hill LEP indicates that the special land use applying to this zone is “Mining”. As a result, underground mining is permissible with consent within this zone.

#### R1 – General Residential

The objectives of this zone are as follows.

- *To provide for the housing needs of the community.*
- *To provide for a variety of housing types and densities.*
- *To enable other land uses that provide facilities or services to meet the day to day needs of residents.*

Clause 7(1)(a) of the *State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007* identifies that “underground mining may be carried out on any land” with development consent. As a result, underground mining is permissible with consent within this zone.

## RU2 – Rural landscape

The objectives of this zone are as follows.

- *To encourage sustainable primary industry production by maintaining and enhancing the natural resource base.*
- *To maintain the rural landscape character of the land.*
- *To provide for a range of compatible land uses, including extensive agriculture.*

Clause 7(1)(a) of the *State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007* identifies that “underground mining may be carried out on any land” with development consent. As a result, underground mining is permissible with consent within this zone.

## 3.4 ANALYSIS OF ENVIRONMENTAL RISK

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 Proposal 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 on 6 June 2016.

- Mr Mitchell Bland, Principal Environmental Consultant with R.W. Corkery & Co. Pty Limited.
- Ms Lauren Clear, Environmental Consultant with R.W. Corkery & Co. Pty Limited.
- Mr Geoff Hender, Deputy General Manager, Perilya Broken Hill 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.

Section 5.2 presents the results of the risk analysis.

### **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 Government agency and community consultation process described in Section 3.2.
- The results of the review of relevant legislation, planning issues, policies and guidelines presented in Section 3.3.
- The results of the risk analysis presented in Section 5.2.
- The experience of RWC in assembling Environmental Impact Statements for similar projects.

The environmental issues identified by this identification process are the following.

1. Air Quality and Human Health.
2. Noise and Vibration.
3. Traffic and Transportation.
4. Historic Heritage.
5. Surface Water.
6. Groundwater.
7. Ecology.
8. Aboriginal Heritage.
9. Visual Amenity.
10. Bushfire.
11. Soils and Land Capability.
12. Agricultural Lands and Enterprises.
13. Socio-Economic.

This page has intentionally been left blank