

## Licence

## Environmental Protection Act 1986, Part V

Licensee: Ramelius Resources Limited

Licence: L8878/2015/1

**Registered office:** Suite 4

148 Greenhill Road PARKSIDE SA 5063

**ACN:** 001 717 540

Premises address: Kathleen Valley Project

Mining tenements M36/375, M36/376 and M36/441

LEINSTER WA 6437 as depicted in Schedule 1.

**Issue date:** Thursday, 2 July 2015

Commencement date: Monday, 6 July 2015

**Expiry date:** Sunday, 5 July 2030

#### Prescribed premises category

Schedule 1 of the Environmental Protection Regulations 1987

Category number	Category description	Category production or design capacity	Approved premises production or design capacity
6	Mine dewatering: premises on which water is extracted and discharged into the environment to allow mining of ore	50 000 tonnes or more per year	470 000 tonnes per annual period
89	Class II or III putrescible landfill site	More than 20 but less than 5 000 tonnes per year	600 tonnes per annual period

### **Conditions**

This Licence is subject to the conditions set out in the attached pages.

Date signed: 15 June 2016

Officer delegated under section 20 of the Environmental Protection Ac-

of the Environmental Protection Act 1986

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### Introduction

This Introduction is not part of the Licence conditions.

#### **DER's industry licensing role**

The Department of Environment Regulation (DER) is a government department for the state of Western Australia in the portfolio of the Minister for Environment. DER's purpose is to advise on and implement strategies for a healthy environment for the benefit of all current and future Western Australians.

DER has responsibilities under Part V of the *Environmental Protection Act 1986* (the Act) for the licensing of prescribed premises. Through this process DER works with the business owners, community, consultants, industry and other representatives to prevent, control and abate pollution and environmental harm to conserve and protect the environment. DER also monitors and audits compliance with works approvals and licence conditions, takes enforcement action as appropriate and develops and implements licensing and industry regulation policy.

#### Licence requirements

This Licence is issued under Part V of the Act. Conditions contained within the Licence relate to the prevention, reduction or control of emissions and discharges to the environment and to the monitoring and reporting of them.

Where other statutory instruments impose obligations on the Premises/Licensee the intention is not to replicate them in the licence conditions. You should therefore ensure that you are aware of all your statutory obligations under the Act and any other statutory instrument. Legislation can be accessed through the State Law Publisher website using the following link: <a href="http://www.slp.wa.gov.au/legislation/statutes.nsf/default.html">http://www.slp.wa.gov.au/legislation/statutes.nsf/default.html</a>

For your Premises relevant statutory instruments include but are not limited to obligations under the:

- Environmental Protection (Unauthorised Discharges) Regulations 2004 these Regulations make it an offence to discharge certain materials such as contaminated stormwater into the environment other than in the circumstances set out in the Regulations.
- Environmental Protection (Controlled Waste) Regulations 2004 these Regulations place obligations on you if you produce, accept, transport or dispose of controlled waste.
- Environmental Protection (Noise) Regulations 1997 these Regulations require noise emissions from the Premises to comply with the assigned noise levels set out in the Regulations.

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You must comply with your licence. Non-compliance with your licence is an offence and strict penalties exist for those who do not comply.

Licence holders are also reminded of the requirements of section 53 of the Act which places restrictions on making certain changes to prescribed premises unless the changes are in accordance with a works approval, licence, closure notice or environmental protection notice.

#### Licence fees

If you have a licence that is issued for more than one year, you are required to pay an annual licence fee prior to the anniversary date of issue of your licence. Non payment of annual licence fees will result in your licence ceasing to have effect meaning that it will no longer be valid and you will need to apply for a new licence for your Premises.

#### Ministerial conditions

If your Premises has been assessed under Part IV of the Act you may have had conditions imposed by the Minister for Environment. You are required to comply with any conditions imposed by the Minister.

#### **Premises description and Licence summary**

The Kathleen Valley Project is located approximately 46 km north of Leinster and 100 km south of Wiluna in the north-eastern Goldfields region of Western Australia. Ramelius Resources Limited (Ramelius) proposed to commence mining at the project in quarter 3, 2015. The majority of mining operation infrastructure, including pits and waste rock dumps, is located on M36/375, with associated dewatering infrastructure and Main Road pit located on M36/376 and M36/441. The project is within the Shire of Leonora and is also located within the Yakabindie Pastoral Station.

The project comprises of three deposits, Mossbecker, Yellow Aster and Nil Desperandum, which will be mined via five small to medium sized open-cut pits. Approximately 300 000 – 400 000 tonnes of ore will be mined per annum over a two year period. Ore will be stockpiled on ROM pads prior to being transported offsite for processing at Ramelius' operating Checkers Treatment Plant, located 370 km west-southwest of the project in Mount Magnet.

To allow for mining of the deposits, dewatering of the Mossbecker Pit will commence in mid-2015. Groundwater will be collected from a number of water bores located at the pit margin or from in-pit sumps and pumped to a turkevs nest transfer dam. One transfer dam will be established at Mossbecker and a second dam at Yellow Aster (which will also service Nil Desperandum Pit).

Surplus water will be pumped to the Main Road Pit via temporary pipelines (1.5 km from Mossbecker and 2.5 km from Nil Desperandum). This pit was previously used for dewatering by the Cosmos Nickel operation which closed in 2012. Existing infrastructure including a bunded ditch and pipeline may be utilised.

A water balance was developed for the dewatering into Main Road Pit, with results indicating the pit can accept a discharge of 9.5 L/s. A maximum pit lake level of 487.9 mAHD was adopted which allows for a minimum freeboard of 4 m below the lowest point along the pit crest, which is sufficient to protect surrounding flora from groundwater level mounding.

Groundwater to be discharged into the Main Road Pit from Mossbecker, Yellow Aster and Nil Desperandum Pits is fresh to brackish. Water quality in the vicinity of the project ranges in total dissolved solids from 471 and 7 842 mg/L.

Small amounts of domestic and inert waste will be produced on site. Solid waste that cannot be reused or recycled will be placed in two onsite landfills. It is expected that inert waste disposal will be less than 500 tonnes per year and putrescible waste disposal is expected to be less than 20 tonnes per year. The proposed landfill sites will be located in the Mossbecker and Yellow Aster waste rock dumps. This Licence is for the operation of a new facility established under works approval W5810/2015/1.

The licences and works approvals issued for the Premises since 02/04/2015 are:

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Instrument log		
Instrument	Issued	Description
W5810/2015/1	16 April 2015	Works approval to construct dewatering pipelines and landfill
L8878/2015/1	2 July 2015	New application
L8878/2015/1	16 june 2016	Amended licence to change AER submission date

#### Severance

It is the intent of these Licence conditions that they shall operate so that, if a condition or a part of a condition is beyond the power of this Licence to impose, or is otherwise *ultra vires* or invalid, that condition or part of a condition shall be severed and the remainder of these conditions shall nevertheless be valid to the extent that they are within the power of this Licence to impose and are not otherwise *ultra vires* or invalid.

#### **END OF INTRODUCTION**

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### Licence conditions

### General

#### 1.1 Interpretation

- 1.1.1 In the Licence, definitions from the Environmental Protection Act 1986 apply unless the contrary intention appears.
- 1.1.2 For the purposes of this Licence, unless the contrary intention appears:

'Act' means the Environmental Protection Act 1986;

'annual period' means the inclusive period from 1 December until 30 November in the following year;

'AS/NZS 5667.1' means the Australian Standard AS/NZS 5667.1 Water Quality - Sampling -Guidance of the Design of sampling programs, sampling techniques and the preservation and handling of samples;

'AS/NZS 5667.11' means the Australian Standard AS/NZS 5667.11 Water Quality - Sampling -Guidance on sampling of groundwaters;

'averaging period' means the time over which a limit or target is measured or a monitoring result is obtained;

'CEO' means Chief Executive Officer of the Department of Environment Regulation;

'CEO' for the purpose of correspondence means;

Chief Executive Officer Administering part V of the Environmental Protection Act 1986

Locked Bag 33 Cloisters Square PERTH WA 6850

Telephone: (08) 6467 5000 Facsimile: (08) 6467 5562 Email: info@der.wa.gov.au;

'controlled waste' has the definition in Environmental Protection (Controlled Waste) Regulations

'freeboard' means the distance between the maximum water surface elevations and the top of retaining banks or structures at their lowest point;

'Licence' means this Licence numbered L8878/2015/1 and issued under the Act;

'Licensee' means the person or organisation named as Licensee on page 1 of the Licence;

'NATA' means the National Association of Testing Authorities, Australia;

'NATA accredited' means in relation to the analysis of a sample that the laboratory is NATA accredited for the specified analysis at the time of the analysis;

'Premises' means the area defined in the Premises Map in Schedule 1 and listed as the Premises address on page 1 of the Licence;

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'quarterly' means the 4 inclusive periods from 1 April to 30 June, 1 July to 30 September, 1 October to 31 December and in the following year, 1 January to 31 March;

'Schedule 1' means Schedule 1 of this Licence unless otherwise stated;

'Schedule 2' means Schedule 2 of this Licence unless otherwise stated;

**'spot sample'** means a discrete sample representative at the time and place at which the sample is taken; and

'**usual working day**' means 0800 – 1700 hours, Monday to Friday excluding public holidays in Western Australia

- 1.1.3 Any reference to an Australian or other standard in the Licence means the relevant parts of the the standard in force from time to time during the term of this Licence.
- 1.1.4 Any reference to a guideline or code of practice in the Licence means the version of that guideline or code of practice in force from time to time, and shall include any amendments or replacements to that guideline or code of practice made during the term of this Licence.

#### 1.2 Premises operation

- 1.2.1 The Licensee shall ensure that any saline dewatering effluent shall only be managed in the following manner:
  - (a) used for dust suppression in a manner that minimises damage to surrounding vegetation; and/or
  - (b) discharged to containment infrastructure or the previously mined Mossbecker pit in accordance with the conditions of this Licence.
- 1.2.2 The Licensee shall ensure that mine water is discharged into Mossbecker and Yellow Aster turkey's nests with the relevant infrastructure requirements and at the locations specified in Table 1.2.1:

Table 1.2.1: Containment Infrastructure			
Containment Material Infrastructure requirements point reference			
Mossbecker turkey's nest	Mine dewater	Lined with 1mm HDPE liner to achieve a permeability of at least <10 <sup>-9</sup> m/s	
Yellow Aster turkey's nest	Mine dewater	Lined with 1mm HDPE liner to achieve a permeability of at least <10 <sup>-9</sup> m/s	

- 1.2.3 The Licensee shall manage the turkey's nests in Table 1.2.1 such that a minimum top of embankment freeboard of 500 mm or a 1 in 100 year/72 hour storm event (whichever is greater) is maintained.
- 1.2.4 The Licensee shall:
  - (a) undertake inspections as detailed in Table 1.2.2;
  - (b) where any inspection identifies that an appropriate level of environmental protection is not being maintained, take corrective action to mitigate adverse environmental consequences as soon as practicable; and
  - (c) maintain a record of all inspections undertaken.

Table 1.2.2: Inspection of infrastructure					
Scope of inspection Type of inspection Frequency of inspection					
Dewatering pipelines	Visual integrity	Twice daily			
Turkey's nests	Visual integrity	Daily			

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1.2.5 The Licensee shall ensure that wastes accepted onto the landfill are only subjected to the process set out in Table 1.2.5 and in accordance with any process limits described in that

Table 1.2.5: Waste processing				
Waste type	Process(es)	Process limits <sup>1, 2</sup>		
Putrescible waste	Desciat	All waste types Disposal of waste by landfilling shall only take place within the		
Inert waste Type 1	Receipt, handling and disposal of waste by landfilling	landfill areas shown on the Map in Schedule 1.  The separation distance between the base of the landfill and the highest groundwater level shall not be less than 2m.		

Note 1: Requirements for landfilling tyres are set out in Part 6 of the Environmental Protection Regulations1987.

Note 2: Additional requirements for the acceptance and landfilling of controlled waste (including asbestos and tyres) are set out in the Environmental Protection (Controlled Waste) Regulations 2004.

The Licensee shall ensure that cover is applied and maintained on landfilled wastes in accordance with Table 1.2.6 and that sufficient stockpiles of cover are maintained on site at all times.

Table 1.2.6: Cover requirements <sup>1</sup>					
Waste type Material Depth Timescales					
Putrescible wastes	Inert and incombustible material	Sufficient to ensure the waste is completely covered and that no waste is exposed	Cover shall be applied monthly		
Inert waste Type 1	No cover requi	red			

Note 1: Additional requirements for the covering of tyres are set out in Part 6 of the Environmental Protection Act 1987.

1.2.7 The Licensee shall ensure that wind-blown waste is contained within the boundary of the premises and that wind-blown waste is returned to the tipping area.

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### 2 Emissions

#### 2.1 General

2.1.1 The Licensee shall record and investigate the exceedance of any descriptive or numerical limit or target specified in any part of section 2 of this Licence.

#### 2.2 Point source emissions to groundwater

2.2.1 The Licensee shall ensure that where waste is emitted to groundwater from the emission points in Table 2.2.1 and identified on the map of emission points in Schedule 1 it is done so in accordance with the conditions of this Licence.

Table 2.2.1: Emission points to groundwater				
Emission point reference	Description	Source including abatement		
Main Road pit	Mine dewater from Mossbecker pit, Yellow Aster pit and Nil Desperandum pit.	Mine dewater		

2.2.2 The Licensee shall not cause or allow point source emissions to groundwater greater than the limits listed in Table 2.2.2

Table 2.2.2: Point source emission limits to groundwater					
Emission point Parameter Limit Averaging period (including units)					
Main Road pit	Standing water level	4 m below crest level	Spot sample		

## 3 Monitoring

#### 3.1 General monitoring

- 3.1.1 The licensee shall ensure that:
  - (a) all water samples are collected and preserved in accordance with AS/NZS 5667 1:
  - (b) all groundwater sampling is conducted in accordance with AS/NZS 5667.11; and
  - (c) all laboratory samples are submitted to and tested by a laboratory with current NATA accreditation for the parameters being measured.
- 3.1.2 The Licensee shall ensure that:
  - (a) monthly monitoring is undertaken at least 15 days apart; and
  - (b) quarterly monitoring is undertaken at least 45 days apart.

#### 3.2 Monitoring of point source emissions to groundwater

3.2.1 The Licensee shall undertake the monitoring in Table 3.2.1 according to the specifications in that table.

Table 3.2.1: Monitoring of point source emissions to groundwater					
Emission point reference Units Frequency					
Main Road pit	Volumetric flow rate	kL	Monthly		
	Standing water level	metres below crest level	Monthly		
	pH <sup>1</sup>	-	Quarterly		
	Total Dissolved Solids (TDS) <sup>1</sup>	mg/L	Quarterly		

Note 1: pH and TDS is permitted to be measured in the field in accordance with Australian Standard 5667.

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### 4 Information

#### 4.1 Records

- 4.1.1 All information and records required by the Licence shall:
  - (a) be legible;
  - (b) if amended, be amended in such a way that the original and subsequent amendments remain legible or are capable of retrieval;
  - (c) except for records listed in 5.1.1(d) be retained for at least 6 years from the date the records were made or until the expiry of the Licence or any subsequent licence: and
  - (d) for those following records, be retained until the expiry of the Licence and any subsequent licence:
    - (i) off-site environmental effects; or
    - (ii) matters which affect the condition of the land or waters.
- 4.1.2 The Licensee shall complete an Annual Audit Compliance Report indicating the extent to which the Licensee has complied with the conditions of the Licence, and any previous licence issued under Part V of the Act for the Premises for the previous annual period.
- 4.1.3 The Licensee shall implement a complaints management system that as a minimum records the number and details of complaints received concerning the environmental impact of the activities undertaken at the Premises and any action taken in response to the complaint.

### 4.2 Reporting

4.2.1 The Licensee shall submit to the CEO an Annual Environmental Report by 31 December in each year. The report shall contain the information listed in Table 4.2.1 in the format or form specified in that table.

Table 4.2.1: Annual Environmental Report			
Condition or table (if relevant)	Parameter	Format or form <sup>1</sup>	
-	Summary of any failure or malfunction of any pollution control equipment and any environmental incidents that have occurred during the annual period and any action taken	None specified	
Table 3.2.1	Monitoring of emissions to groundwater	None specified	
4.1.2	Compliance	Annual Audit Compliance Report (AACR)	
4.1.3	Complaints summary	None specified	

Note 1: Forms are in Schedule 2

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4.2.2 The Licensee shall submit the information in Table 4.2.2 to the CEO according to the specifications in that table.

Table 4.2.2: Non-annual reporting requirements					
Condition or table (if relevant)	Parameter	Reporting period	Reporting date (after end of the reporting period)	Format or form <sup>1</sup>	
-	Copies of original monitoring reports submitted to the Licensee by third parties	Not Applicable	Within 14 days of the CEOs request	As received by the Licensee from third parties	

Note 1: Forms are in Schedule 2

#### 4.3 Notification

4.3.1 The Licensee shall ensure that the parameters listed in Table 4.3.1 are notified to the CEO in accordance with the notification requirements of the table.

Table 4.3.1: Notification requirements					
Condition or table (if relevant)	Parameter	Notification requirement <sup>1</sup>	Format or form <sup>2</sup>		
2.1.1	Breach of any limit specified in the Licence	Part A: As soon as practicable but no later than 5pm of the next usual working day.  Part B: As soon as practicable	N1		
-	Notification of care and maintenance status	Within seven days of the decision to enter care and maintenance status	-		
-	Intention to resume normal operations from care and maintenance status	At least 30 days before operations recommence.	-		

Note 1: Notification requirements in the Licence shall not negate the requirement to comply with s72 of the Act

Note 2: Forms are in Schedule 2

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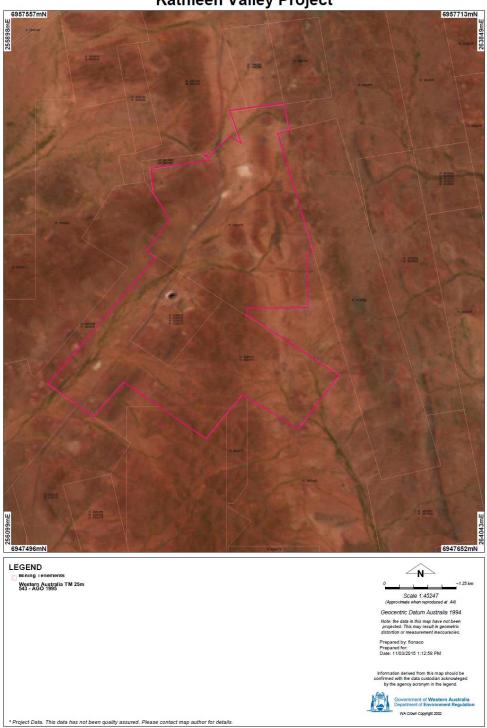


# Schedule 1: Maps

### **Premises map**

The Premises is shown in the map below. The pink line depicts the Premises boundary.

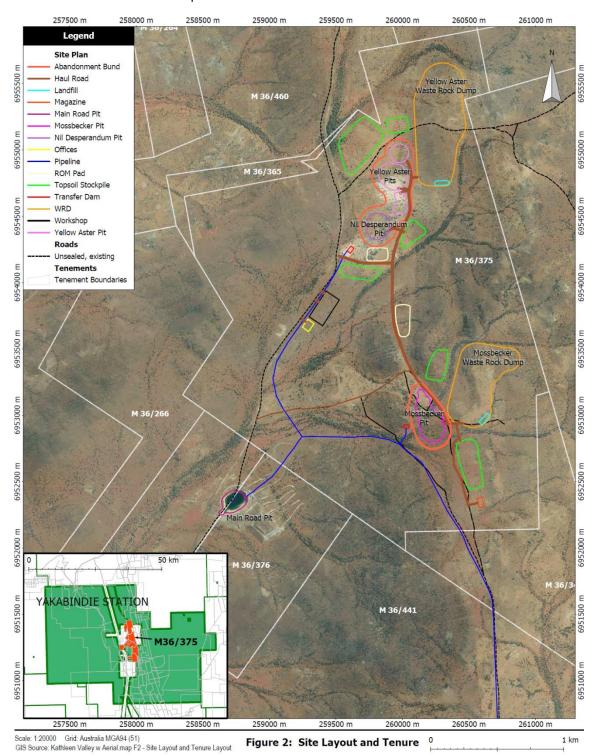
Kathleen Valley Project



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### Map of emission points

The locations of the emission points defined in Tables 1.3.5 and 2.4.1 are shown below.



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## Schedule 2: Reporting & notification forms

These forms are provided for the proponent to report monitoring and other data required by the Licence. They can be requested in an electronic format.

### ANNUAL AUDIT COMPLIANCE REPORT PROFORMA

## **SECTION A**

LICENCE DETAILS	
Licence Number:	Licence File Number:
Company Name:	ABN:
Trading as:	
Reporting period:	·
to	
STATEMENT OF COMPLIANCE WITH LICENCE CONDITI	IONS
<ol> <li>Were all conditions of the Licence complied with within t box)</li> </ol>	he reporting period? (please tick the appropriate
	Yes ☐ Please proceed to Section
	No ☐ Please proceed to Section
Each page must be initialled by the person(s) who signs Sec (AACR).	ction C of this Annual Audit Compliance Report
Initial:	

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Environmental Protection Act 1986 Licence: L8878/2015/1 File Number: DER2015/000217

C

В



## **SECTION B**

### DETAILS OF NON-COMPLIANCE WITH LICENCE CONDITION.

Please use a separate page for each Licence condition that was not complied with.			
a) Licence condition not complied with:			
b) Date(s) when the non compliance occurred, if applicable:			
c) Was this non compliance reported to DER?:			
Yes Reported to DER verbally  Date  Reported to DER in writing  Date	□ No		
d) Has DER taken, or finalised any action in relation to the non cor	mpliance?:		
e) Summary of particulars of the non compliance, and what was th	e environmental impact:		
f) If relevant, the precise location where the non compliance occurr	red (attach map or diagram):		
g) Cause of non compliance:			
h) Action taken, or that will be taken to mitigate any adverse effects	s of the non compliance:		
i) Action taken or that will be taken to prevent recurrence of the non compliance:			
Each page must be initialled by the person(s) who signs Section C	of this AACR		
Initial:			

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### **SECTION C**

#### SIGNATURE AND CERTIFICATION

This Annual Audit Compliance Report (AACR) may only be signed by a person(s) with legal authority to sign it. The ways in which the AACR must be signed and certified, and the people who may sign the statement, are set out below.

Please tick the box next to the category that describes how this AACR is being signed. If you are uncertain about who is entitled to sign or which category to tick, please contact the licensing officer for your premises.

If the licence holder is	The Annual Audit Compliance Report must be signed and certified:
	by the individual licence holder, or
An individual	by a person approved in writing by the Chief Executive Officer of the Department of Environment Regulation to sign on the licensee's behalf.
A firm or other	by the principal executive officer of the licensee; or
unincorporated company	by a person with authority to sign on the licensee's behalf who is approved in writing by the Chief Executive Officer of the Department of Environment Regulation.
	by affixing the common seal of the licensee in accordance with the <i>Corporations Act 2001</i> ; or
	by two directors of the licensee; or
	by a director and a company secretary of the licensee, or
A corporation	if the licensee is a proprietary company that has a sole director who is also the sole company secretary – by that director, or
	by the principal executive officer of the licensee; or
	by a person with authority to sign on the licensee's behalf who is approved in writing by the Chief Executive Officer of the Department of Environment Regulation.
A public authority	by the principal executive officer of the licensee; or
A public authority (other than a local government)	by a person with authority to sign on the licensee's behalf who is approved in writing by the Chief Executive Officer of the Department of Environment Regulation.
a local government	by the chief executive officer of the licensee; or
a local government	by affixing the seal of the local government.

It is an offence under section 112 of the *Environmental Protection Act 1986* for a person to give information on this form that to their knowledge is false or misleading in a material particular. There is a maximum penalty of \$50,000 for an individual or body corporate.

I/We declare that the information in this annual audit compliance report is correct and not false or misleading in a material particular.

SIGNATURE:	SIGNATURE:
NAME: (printed)	NAME: (printed)
POSITION:	POSITION:
DATE:/	DATE:/
SEAL (if signing under seal)	

Amendment Date: Thursday, 16 June 2016

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Form: N1 Date of breach:

Notification of detection of the breach of a limit or any failure or malfunction of any pollution control equipment or any incident which has caused, is causing or may cause pollution.

These pages outline the information that the operator must provide.

Units of measurement used in information supplied under Part A and B requirements shall be

appropriate to the circumstance of actual emissions and authoris	es of the emission. Where appropriate, a comparison should be made sed emission limits.
Part A	
Licence Number	
Name of operator	
Location of Premises	
Time and date of the detection	
Notification requirements for	the breach of a limit
Emission point reference/ source	
Parameter(s)	
Limit	
Measured value	
Date and time of monitoring	
Measures taken, or intended to	
be taken, to stop the emission	
Notification requirements for	any failure or malfunction of any pollution control equipment or
any incident which has cause	ed, is causing or may cause pollution
Date and time of event	
Reference or description of the	
location of the event	
Description of where any release	
into the environment took place	
Substances potentially released	
Best estimate of the quantity or	
rate of release of substances	
Measures taken , or intended to	
be taken, to stop any emission	
Description of the failure or	

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accident

## Part B

Any more accurate information on the matters for	
notification under Part A.	
Maggures taken or intended to be taken to	
Measures taken, or intended to be taken, to	
prevent a recurrence of the incident.	
Measures taken, or intended to be taken, to rectify,	
limit or prevent any pollution of the environment	
which has been or may be caused by the emission.	
The dates of any previous N1 notifications for the	
Premises in the preceding 24 months.	
Name	
Post	
Signature on behalf of	
Ramelius Resources Limited	
Date	



# **Decision Document**

## Environmental Protection Act 1986, Part V

**Proponent: Ramelius Resources Limited** 

Licence: L8878/2015/1

Registered office: Suite 4

148 Greenhill Road PARKSIDE SA 5063

**ACN**: 001 717 540

Premises address: Kathleen Valley Project

Mining tenements M36/375, M36/376 and M36/441

LEINSTER WA 6437

**Issue date:** Thursday, 2 July 2015

Commencement date: Monday, 6 July 2015

Expiry date: Sunday, 5 July 2030

#### **Decision**

Based on the assessment detailed in this document the Department of Environment Regulation (DER), has decided to issue an amended licence. DER considers that in reaching this decision, it has taken into account all relevant considerations and legal requirements and that the Licence and its conditions will ensure that an appropriate level of environmental protection is provided.

Decision Document prepared by: Fiona Sharpe

Licensing Officer

Decision Document authorised by: Tim Gentle

**Delegated Officer** 

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## 1 Purpose of this Document

This decision document explains how DER has assessed and determined the application and provides a record of DER's decision-making process and how relevant factors have been taken into account. Stakeholders should note that this document is limited to DER's assessment and decision making under Part V of the *Environmental Protection Act 1986*. Other approvals may be required for the proposal, and it is the proponent's responsibility to ensure they have all relevant approvals for their Premises.

## 2 Administrative summary

Administrative details			
Application type	Works Approval New Licence Licence amendr Works Approval		□ □ ⊠ ent □
	Category numb	er(s)	Assessed design capacity
Activities that cause the premises to become prescribed premises	6		470 000 tonnes per annual period
proceniosa premiese	89		600 tonnes per annual period
Application verified	Date: 2 June 20	16	
Application fee paid	Date: N/A		
Works Approval has been complied with	Yes No	] N/	A
Compliance Certificate received	Yes No	] N/	'A⊠
Commercial-in-confidence claim	Yes No		
Commercial-in-confidence claim outcome			
Is the proposal a Major Resource Project?	Yes⊠ No[		
Was the proposal referred to the Environmental Protection Authority (EPA) under Part IV of the	Yes□ No	Refe	erral decision No:
Environmental Protection Act 1986?	103 1102		aged under Part V

		Assessed under Part IV	
Is the proposal subject to Ministerial Conditions?	Yes□ No⊠	Ministerial statement No: EPA Report No:	
Does the proposal involve a discharge of waste into a designated area (as defined in section 57 of the <i>Environmental Protection Act 1986</i> )?	Yes No⊠  Department of War	ter consulted Yes ⊠ No □	
Is the Premises within an Environmental Protection Policy (EPP) Area Yes□ No⊠  If Yes include details of which EPP(s) here.			
Is the Premises subject to any EPP requirements?  If Yes, include details here, eg Site is subject to SC	Yes☐ No⊠ 0 <sub>2</sub> requirements of K	winana EPP.	

## 3 Executive summary of proposal and assessment

The Kathleen Valley Project is located approximately 46 km north of Leinster and 100 km south of Wiluna in the north-eastern Goldfields region of Western Australia. Ramelius Resources Limited (Ramelius) proposed to commence mining at the project in quarter 3, 2015. The majority of mining operation infrastructure, including pits and waste rock dumps, is located on M36/375, with associated dewatering infrastructure and Main Road pit located on M36/376 and M36/441. The project is within the Shire of Leonora and is also located within the Yakabindie Pastoral Station.

The project comprises of three deposits, Mossbecker, Yellow Aster and Nil Desperandum, which will be mined via five small to medium sized open-cut pits. Approximately 300 000 – 400 000 tonnes of ore will be mined per annum over a two year period. Ore will be stockpiled on ROM pads prior to being transported offsite for processing at Ramelius' operating Checkers Treatment Plant, located 370 km west-southwest of the project in Mount Magnet.

To allow for mining of the deposits, dewatering of the Mossbecker Pit will commence in mid-2015. Groundwater will be collected from a number of water bores located at the pit margin or from in-pit sumps and pumped to a turkeys nest transfer dam. One transfer dam will be established at Mossbecker and a second dam at Yellow Aster (which will also service Nil Desperandum Pit).

Surplus water will be pumped to the Main Road Pit via temporary pipelines (1.5 km from Mossbecker and 2.5 km from Nil Desperandum). This pit was previously used for dewatering by the Cosmos Nickel operation which closed in 2012. Existing infrastructure including a bunded ditch and pipeline may be utilised.

A water balance was developed for the dewatering into Main Road Pit, with results indicating the pit can accept a discharge of 9.5 L/s. A maximum pit lake level of 487.9 mAHD was adopted which allows for a minimum freeboard of 4 m below the lowest point along the pit crest, which is sufficient to protect surrounding flora from groundwater level mounding.

Groundwater to be discharged into the Main Road Pit from Mossbecker, Yellow Aster and Nil Desperandum Pits is fresh to brackish. Water quality in the vicinity of the project ranges in total dissolved solids from 471 and 7 842 mg/L.

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Small amounts of domestic and inert waste will be produced on site. Solid waste that cannot be reused or recycled will be placed in two onsite landfills. It is expected that inert waste disposal will be less than 500 tonnes per year and putrescible waste disposal is expected to be less than 20 tonnes per year. The proposed landfill sites will be located in the Mossbecker and Yellow Aster waste rock dumps.

This amendment is to change the submission date for the Annual Environmental Report (AER) following a request by the Licensee. The original Licence had a due date of 31 May in each year with a reporting period of 1 Apirl until 31 March in each year. However, the Licensee requested this be changed to match the regulatory requirement for the Department of Mines and Petroleum (DMP). The due date for the AER is now 31 December in each year with an annual period of 1 December until 31 November in the following year.

During this amendment the Licence has also been updated to remove any conditions which are deemed not enforceable, not valid or not risk-based in accordance with DER's Guidance Statement: Setting Conditions.

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### 4 Decision table

All applications are assessed in line with the *Environmental Protection Act 1986*, the *Environmental Protection Regulations 1987* and DER's Operational Procedure on Assessing Emissions and Discharges from Prescribed Premises. Where other references have been used in making the decision they are detailed in the decision document.

DECISION TAB	DECISION TABLE				
Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents		
General conditions	L1.2.1 – 1.2.5	General conditions have been removed from the licence as they are deemed to be either not enforceable, not valid or risk-based in accordance with DER's Guidance Statement: Setting Conditions.	DERs Guidance Statement: Setting Conditions October 2015		
Premises operation	L1.3.8 – 1.3.10	Premises operation conditions relating to the construction requirements of the landfill and the submission of the compliance certificate have been removed during this amendment. This construction is completed and the compliance certificate was submitted to DER in July 2015.	Proponent compliance certificate		
Point source emissions to groundwater including monitoring	2.4.3	Condition 2.4.3 has been removed in line with DER's Guidance Statement: Setting Conditions. Targets are not deemed enforceable.	DER's Guidance Statement: Setting Conditions October 2015		
Information	5.2.1	The annual period and due date of the Annual Environmental Report have been amended as requested by the Licensee to line up with the Department of Mines and Petroleum. The AER is now due on 31 December in each year, instead of 31 May. The annual period is now from 1 December until 31 November in the following year.	N/A		
Licence Duration	N/A	The Licence expiry date has been amended in accordance with the Notice of Amendment of Licence Expiry Dates and DER's Guidance Statement: Licence Duration. The new expiry date is 5 July 2030.	DER's Guidance Statement: Licence Duration		

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DECISION TAB	LE		
Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
			May 2015



## 5 Advertisement and consultation table

Date	Event	Comments received/Notes	How comments were taken into consideration
09/06/2016	Proponent sent a copy of draft instrument	No comments received.	N/A



## 6 Risk Assessment

Note: This matrix is taken from the DER Corporate Policy Statement No. 07 - Operational Risk Management

### **Table 1: Emissions Risk Matrix**

Likelihood	Consequence					
	Insignificant	Minor	Moderate	Major	Severe	
Almost Certain	Moderate	High	High	Extreme	Extreme	
Likely	Moderate	Moderate	High	High	Extreme	
Possible	Low	Moderate	Moderate	High	Extreme	
Unlikely	Low	Moderate	Moderate	Moderate	High	
Rare	Low	Low	Moderate	Moderate	High	