



Government of **Western Australia**  
Department of **Environment Regulation**

Your ref: L8293/2008/2  
Our ref: DER2013/001123  
Enquiries: Sonya Poor  
Phone: 9182 2009  
Fax: 9144 1118  
Email: [sonya.poor@der.wa.gov.au](mailto:sonya.poor@der.wa.gov.au)

Mr Sean Savage  
Specialist Environmental Advisor  
Robe River Mining Co Pty Ltd  
152-158 St Georges Terrace  
PERTH WA 6000

Dear Mr Savage

***ENVIRONMENTAL PROTECTION ACT 1986***

**Licence: L8293/2008/2**

**Occupier: Robe River Mining Co Pty Ltd**

**Premises: Pannawonica Deepdale Landfill**

You are hereby advised that a licence under the *Environmental Protection Act 1986* (the Act) has been granted for the above premises. The Department of Environment Regulation will advertise the issuing of this licence in the public notices section of *The West Australian* newspaper.

The licence includes attached conditions. Under Section 58(1) of the Act, it is an offence to contravene a condition of a licence. This offence carries a penalty of up to \$125,000 and a daily penalty of up to \$25,000.

In accordance with section 102(1)(c) of the Act, you have 21 days to appeal the conditions of the licence. Under section 102(3)(a) of the Act, any other person may also appeal the conditions of the licence.

To make an appeal or check if any appeals have been made, contact the Office of the Appeals Convenor on 6467 5190. Please direct all other inquiries to the Licensing Officer above.

Yours sincerely

Ruth Dowd  
Officer delegated under Section 20  
of the *Environmental Protection Act 1986*

Thursday, 20 February 2014

enc: *Environmental Protection Act 1986* Licence L8293/2008/2, Decision Document  
cc: Local Government Authority: Shire of Ashburton



## LICENCE FOR PRESCRIBED PREMISES *Environmental Protection Act 1986*

LICENCE NUMBER: L8293/2008/2

FILE NUMBER: DER2013/001123

### LICENSEE

Robe River Mining Co Pty Ltd  
Level 27, Central Park  
152-158 St Georges Terrace  
PERTH WA 6000  
ACN: 008 694 246

### PREMISES

Pannawonica Deepdale Landfill  
Part of AML70/248 within coordinates: E427700.5 N7602236.2; E428199.6 N7602451.7;  
E428259.6 N7602137.1; E427835.8 N7601980.5  
FORTESCUE WA 6716  
(as depicted in Attachment 1)

### PRESCRIBED PREMISES CATEGORY

Schedule 1 of the *Environmental Protection Regulations 1987*

CATEGORY NUMBER	CATEGORY DESCRIPTION	CATEGORY PRODUCTION OR DESIGN CAPACITY	PREMISES PRODUCTION OR DESIGN CAPACITY
64	Class II putrescible landfill site	20 tonnes or more per year	15 000 tonnes per year

### CONDITIONS

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

Officer delegated under section 20  
of the *Environmental Protection Act 1986*

ISSUE DATE: Thursday, 20 February 2014

COMMENCEMENT DATE: Sunday, 2 March 2014

EXPIRY DATE: Friday, 1 March 2019

# CONDITIONS OF LICENCE

## *Environmental Protection Act 1986*

LICENCE NUMBER: L8293/2008/2

FILE NUMBER: DER2013/001123

### DEFINITIONS

In these conditions of licence, unless inconsistent with the text or subject matter:

**'Clean Fill'** has the meaning defined in Landfill Waste Classification and Waste Definitions 1996 (As amended December 2009), published by the Chief Executive Officer and as amended from time to time;

**'Cover Material'** means subsoil or other approved inert waste used for covering of waste;

**'Director'** means Director, Environmental Regulation Division of the Department of Environment Regulation for and on behalf of the Chief Executive Officer as delegated under section 20 of the *Environmental Protection Act 1986*;

**'Director'** for the purpose of correspondence means;

Regional Leader, Industry Regulation, Pilbara Region  
Department of Environment Regulation  
PO Box 835  
KARRATHA WA 6714  
Telephone: (08) 9182 2000  
Facsimile: (08) 9144 1118  
Email: industryregpilbara@dec.wa.gov.au;

**'Inert Waste Type 1'** has the meaning defined in Landfill Waste Classification and Waste Definitions 1996 (As amended December 2009), published by the Chief Executive Officer and as amended from time to time;

**'Inert Waste Type 2'** has the meaning defined in Landfill Waste Classification and Waste Definitions 1996 (As amended December 2009), published by the Chief Executive Officer and as amended from time to time;

**'Landfill Waste Classification and Waste Definitions 1996 (As amended December 2009)'** means the document entitled "Landfill Waste Classification and Waste Definitions 1996 (As amended December 2009) published by the Chief Executive Officer and as amended from time to time;

**'Special Waste Type 1'** has the meaning defined in Landfill Waste Classification and Waste Definitions 1996 (As amended December 2009) published by the Chief Executive Officer and as amended from time to time; and

**'Tipping Area'** means the area of the premises where waste currently being brought to the premises is being deposited.

### GENERAL CONDITIONS

#### WASTE ACCEPTANCE

- 1 The licensee shall accept and bury only the following types of waste at the premises:
  - (i) clean fill;
  - (ii) inert waste type 1;
  - (iii) inert waste type 2;

# **CONDITIONS OF LICENCE**

## ***Environmental Protection Act 1986***

**LICENCE NUMBER:** L8293/2008/2

**FILE NUMBER:** DER2013/001123

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- (iv) putrescible wastes; and
- (v) special waste type 1.

### **DISPOSAL OF ASBESTOS WASTE**

- 2(a) The licensee shall ensure that material containing asbestos is covered as soon as practicable, after its disposal, with a minimum depth of one metre of cover material.
- 2(b) The licensee shall ensure that material containing asbestos is disposed of under the personal supervision of the licensee, or the personal supervision of a person nominated by the licensee.
- 2(c) The licensee shall ensure that an accurate and up to date register is kept of material containing asbestos disposed of at the premises and include the following information in the register within two hours of supervising the covering of waste:
  - (i) the date;
  - (ii) the person's name that disposed of the waste; and
  - (iii) that the waste has been covered in accordance with condition 3.
- 2(d) The licensee shall maintain a plan showing the current position of material containing asbestos disposed of at the premises.

### **MANAGEMENT OF LANDFILL ACTIVITIES**

- 3 The licensee shall ensure that:
  - (i) waste is placed in a defined trench or within an area enclosed by earthen bunds;
  - (ii) the tipping area is restricted to a maximum linear length of 30 metres;
  - (iii) waste in the tipping area is covered weekly;
  - (iv) there is enough cover material to cover waste at least twice;
  - (v) waste is covered with cover material;
  - (vi) waste is totally covered so that no waste is left exposed; and
  - (vii) the tipping area is no greater than two metres above ground level in height.

### **WINDBLOWN WASTE**

- 4(a) The licensee shall maintain a wire stock fence around the boundary of the active landfill area.
- 4(b) The licensee shall ensure that any entrance to the premises is securely locked when the premises is unattended.
- 4(c) The licensee shall ensure that windblown waste is contained within the boundary of the premises.
- 4(d) The licensee shall ensure that any waste that has been washed or blown away from the tipping area is collected and returned to the tipping area on a monthly basis.

### **UNCONTAMINATED STORMWATER MANAGEMENT**

- 5(a) The licensee shall direct stormwater away from areas of the site where there is waste.
- 5(b) The licensee shall ensure that water that has come into contact with waste is diverted into a sump on the premises or otherwise retained on the premises.

# CONDITIONS OF LICENCE

## *Environmental Protection Act 1986*

LICENCE NUMBER: L8293/2008/2

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### FIREBREAKS

- 6 The licensee must ensure that there is a firebreak of at least three metres around the boundary of the site.

### SIGNAGE

- 7 The licensee shall install and maintain a sign at the entrance to the premises which clearly displays the following:
- (i) contact telephone number for information and complaints or notification of fires;
  - (ii) a list of materials that are accepted;
  - (iii) the types of waste that must not be deposited on the premises and a contact telephone number for alternative disposal options; and
  - (iv) a warning, indicating penalties for people lighting fires.

### REPORTING CONDITIONS

- 8 The licensee shall by **30 April** in each year, provide to the Director an Annual Audit Compliance Report in the form in Attachment 2 to this licence, signed and certified in the manner required by Section C of the form, indicating the extent to which the licensee has complied with the conditions of this licence, and any previous licence issued under Part V of the Act for the premises, during the period beginning **1 January** the previous year and ending on **31 December** in that year.



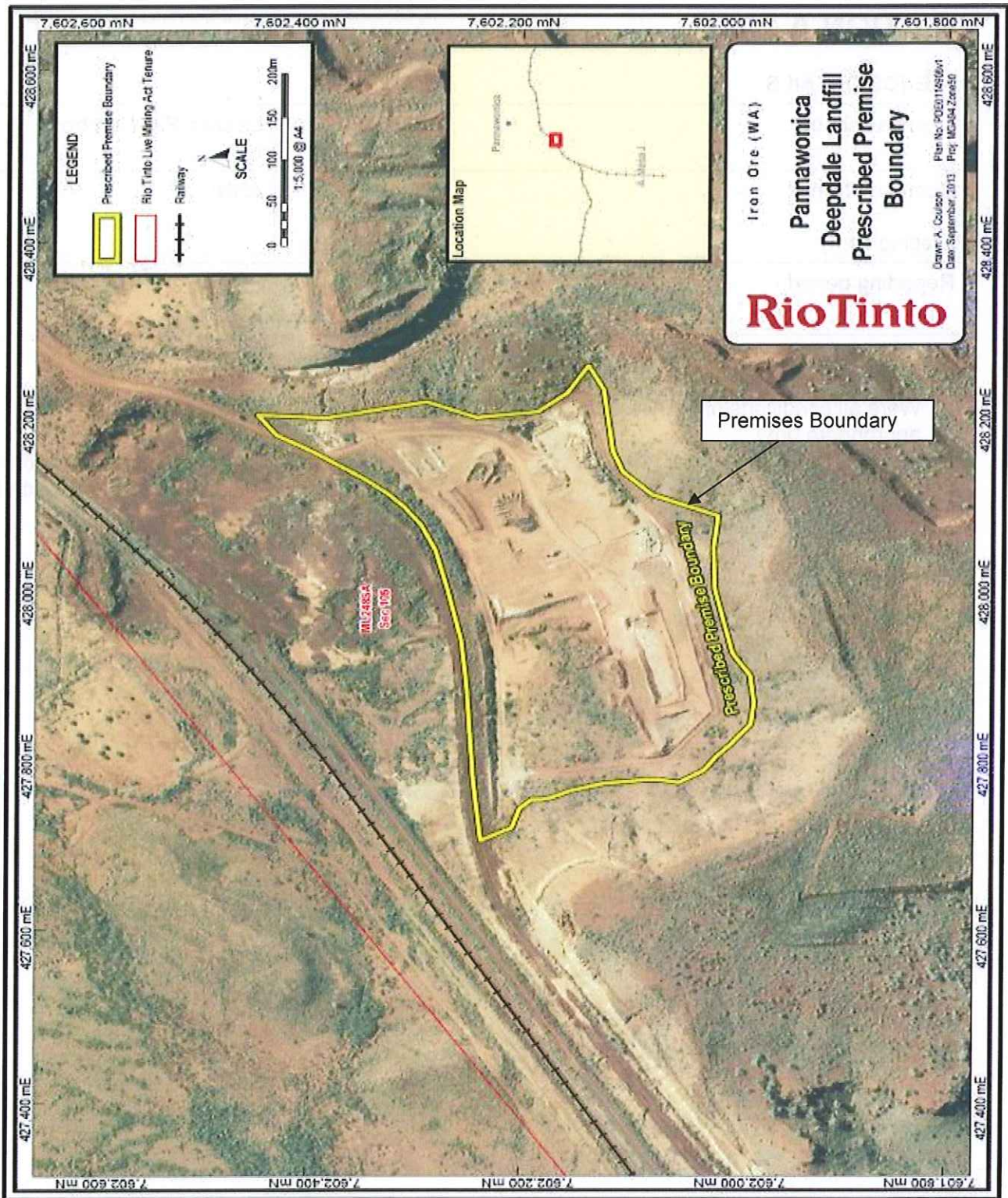
# CONDITIONS OF LICENCE

## Environmental Protection Act 1986

LICENCE NUMBER: L8293/2008/2

FILE NUMBER: DER2013/001123

### ATTACHMENT 1 – PLAN OF PREMISES



# CONDITIONS OF LICENCE

## *Environmental Protection Act 1986*

LICENCE NUMBER: L8293/2008/2

FILE NUMBER: DER2013/001123

### ATTACHMENT 2 – ANNUAL AUDIT COMPLIANCE REPORT

## SECTION A

### LICENCE DETAILS

Licence Number:	Licence File Number:
Company Name:	ABN:
Trading as:	
Reporting period: _____ to _____	

### STATEMENT OF COMPLIANCE WITH LICENCE CONDITIONS

1. Were all conditions of licence complied with within the reporting period? (please tick the appropriate box)

Yes  Please proceed to Section C  
No  Please proceed to Section B

Each page must be initialed by the person(s) who signs Section C of this Annual Audit Compliance Report

INITIAL: \_\_\_\_\_

# CONDITIONS OF LICENCE

## *Environmental Protection Act 1986*

LICENCE NUMBER: L8293/2008/2

FILE NUMBER: DER2013/001123

### **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?	
<input type="checkbox"/> Yes <input type="checkbox"/> Reported to DER verbally    Date _____	<input type="checkbox"/> No
<input type="checkbox"/> Reported to DER in writing    Date _____	
d) Has DER taken, or finalised any action in relation to the non compliance?	
e) Summary of particulars of non compliance, and what was the environmental impact?	
f) If relevant, the precise location where the non compliance occurred (attach map or diagram)	
g) Cause of non compliance	
h) Action taken or that will be taken to mitigate any adverse effects of the non compliance	
i) Action taken or that will be taken to prevent recurrence of the non compliance	

Each page must be initialed by the person(s) who signs Section C of this Annual Audit Compliance Report  
INITIAL: \_\_\_\_\_



# CONDITIONS OF LICENCE

## *Environmental Protection Act 1986*

LICENCE NUMBER: L8293/2008/2

FILE NUMBER: DER2013/001123

### **SECTION C - SIGNATURE AND CERTIFICATION**

This Annual Audit Compliance Report must only be signed by a person(s) with legal authority to sign it. The ways in which the Annual Audit Compliance Report 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 Annual Audit Compliance Report 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:
an individual	<input type="checkbox"/> by the individual licence holder, or <input type="checkbox"/> 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 unincorporated company	<input type="checkbox"/> by the principal executive officer of the licensee; or <input type="checkbox"/> 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 corporation	<input type="checkbox"/> by affixing the common seal of the licensee in accordance with the Corporations Act 2001; or <input type="checkbox"/> by two directors of the licensee; or <input type="checkbox"/> by a director and a company secretary of the licensee, or <input type="checkbox"/> if the licensee is a proprietary company that has a sole director who is also the sole company secretary – by that director, or <input type="checkbox"/> by the principal executive officer of the licensee; or <input type="checkbox"/> 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 (other than a local government)	<input type="checkbox"/> by the principal executive officer of the licensee; or <input type="checkbox"/> 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	<input type="checkbox"/> by the chief executive officer of the licensee; or <input type="checkbox"/> 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)



# Decision Document

## *Environmental Protection Act 1986, Part V*

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**Proponent:** Robe River Mining Co Pty Ltd

**Licence:** L8293/2008/2

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**Registered office:** Level 27, Central Park  
152-158 St Georges Terrace  
PERTH WA 6000

**ACN:** 008 694 246

**Premises address:** Pannawonica Deepdale Landfill  
Part of AML70/248 within coordinates: E427700.5 N7602236.2; E428199.6  
N7602451.7; E428259.6 N7602137.1; E427835.8 N7601980.5  
FORTESCUE WA 6716

**Issue date:** Thursday, 20 February 2014

**Commencement date:** Sunday, 2 March 2014

**Expiry date:** Friday, 1 March 2019

### Decision

Based on the assessment detailed in this document the Department of Environment Regulation (DER), has decided to issue a 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: Sonya Poor  
Regional Environmental Officer

Decision Document authorised by: Alana Kidd  
Regional Leader



## Contents

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## 1 Purpose of this Document

This decision document explains how DER has assessed and determined the application for a Works Approval or Licence, 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.

### Works approval and licence conditions

DER has three types of conditions that may be imposed on Works Approvals and Licences. They are as follows;

#### Standard conditions (SC)

DER has standard conditions that are imposed on all Works Approvals and Licences regardless of the activities undertaken on the Premises and the information provided in the application. These are included as the following conditions on Works Approvals and Licences:

Works Approval conditions: 1.1.1-1.1.4, 1.2.1, 1.2.2, 5.1.1 and 5.1.2.

Licence conditions: 1.1.1-1.1.4, 1.2.1-1.2.4, 5.1.1-5.1.4 and 5.2.1.

For such conditions, justification within the Decision Document is not provided.

#### Optional standard conditions (OSC)

In the interests of regulatory consistency DER has a set of optional standard conditions that can be imposed on Works Approvals and Licences. DER will include optional standard conditions as necessary, and are likely to constitute the majority of conditions in any Licence. The inclusion of any optional standard conditions is justified in Section 4 of this document.

#### Non standard conditions (NSC)

Where the proposed activities require conditions outside the standard conditions suite DER will impose one or more non-standard conditions. These include both premises and sector specific conditions, and are likely to occur within few Licences. Where used, justification for the application of these conditions will be included in Section 4.



## 2 Administrative summary

Administrative details		
Application type	Works Approval <input type="checkbox"/>	
	New Licence <input checked="" type="checkbox"/>	
	Licence amendment <input type="checkbox"/>	
	Works Approval amendment <input type="checkbox"/>	
Activities that cause the premises to become prescribed premises	<b>Category number(s)</b>	<b>Assessed design capacity</b>
	64	15 000 tonnes per year
Application verified	Date: 5/12/2013	
Application fee paid	Date: 14/01/2014	
Works Approval has been complied with	Yes <input type="checkbox"/>	No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>
Compliance Certificate received	Yes <input type="checkbox"/>	No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>
Commercial-in-confidence claim	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Commercial-in-confidence claim outcome	N/A	
Is the proposal a Major Resource Project?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Was the proposal referred to the Environmental Protection Authority (EPA) under Part IV of the <i>Environmental Protection Act 1986</i> ?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
		Referral decision No: Managed under Part V <input type="checkbox"/> Assessed under Part IV <input type="checkbox"/>
Is the proposal subject to Ministerial Conditions?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
		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 <input type="checkbox"/>	No <input checked="" type="checkbox"/>
	Department of Water consulted Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Is the Premises within an Environmental Protection Policy (EPP) Area	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
If Yes include details of which EPP(s) here.		
Is the Premises subject to any EPP requirements?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
If Yes, include details here, eg Site is subject to SO <sub>2</sub> requirements of Kwinana EPP.		





### 3 Executive summary of proposal

Robe River Mining Co Pty Ltd (Robe River) operate the Pannawonica Deepdale Landfill (Deepdale landfill). The landfill is situated 5 kilometres (km) south-west of the township of Pannawonica and 8km north of the Mesa J mine in the Pilbara region of Western Australia.

The landfill has an area of 12 hectares (ha). The depth below ground level is three to four metres and there is an above ground maximum of two metres, including the final capping material, which allows for final settlement potential.

The site receives a mixture of wastes from commercial, residential and mining activities. Vehicle tyres, asbestos and wooden packaging materials add to the normal putrescible wastes generated within the townsite. The design capacity of the landfill is 15 000 tonnes per year (t/yr), but the actual throughput is closer to 5 000 t/yr.

## 4 Decision table

All applications are assessed under the *Environmental Protection Act 1986*, the *Environmental Protection Regulations 1987* and the risk matrix attached to this Decision Document in Section 6. Where other references have been used in making the decision they are detailed in the decision table.

Note: This licence is a non-REFIRE licence. Where applicable references have been made to the non-REFIRE licence conditions.

DECISION TABLE				
Works Approval / Licence section	Condition number W = Works Approval L = Licence	OSC or NSC	Justification (including risk description & decision methodology where relevant)	Reference documents
General conditions	N/A.	N/A.	Conditions on licence relating to waste acceptance, disposal of asbestos waste, management of landfill activities, windblown waste, uncontaminated stormwater management, firebreaks and signage.  No additional conditions are required to be added to the licence.	General provisions of the <i>Environmental Protection Act 1986</i> .
Emissions general	N/A.	N/A.	There are no specified conditions relating to emissions.	N/A.
Point source emissions to air including monitoring	N/A.	N/A.	<b>Operation</b> <i>Emission Significance - 1</i> <i>Socio-political context - No concern or interest.</i> <i>Risk Assessment - E - No regulation, other management mechanisms.</i>  No point source air emissions are expected from the operation of the landfill.  No specified conditions relating to point source emissions to air or the monitoring of these emissions are required to be added to the licence.	General provisions of the <i>Environmental Protection Act 1986</i> .



**DECISION TABLE**

Works Approval / Licence section	Condition number W = Works Approval L = Licence	OSC or NSC	Justification (including risk description & decision methodology where relevant)	Reference documents
Point source emissions to surface water including monitoring	N/A.	N/A.	<p><b>Operation</b>  <i>Emission Significance</i> – 1  <i>Socio-political context</i> – No concern or interest.  <i>Risk Assessment</i> – E – No regulation, other management mechanisms.</p> <p>There will be no point source emissions to water during operation of the landfill. The nearest major waterway is the Robe River, an ephemeral river system, which contains permanent and semi-permanent pools. The landfill boundary is located approximately 520 metres (m) from the river's edge. The landfill is separated from the river by a range of low hills and all drainage from the landfill flows away from the river.</p> <p>No specified conditions relating to point source emissions to water or the monitoring of such emissions are required to be added to the licence.</p>	<p>General provisions of the <i>Environmental Protection Act 1986</i>.  <i>Environmental Protection (Unauthorised Discharges) Regulations 2004</i>.</p>
Point source emissions to groundwater including monitoring	N/A.	N/A.	<p><b>Operation</b>  <i>Emission Significance</i> – 1  <i>Socio-political context</i> – No concern or interest.  <i>Risk Assessment</i> – E – No regulation, other management mechanisms.</p> <p>Groundwater occurs in an unconfined fractured rock aquifer of variable permeability, which occurs at a depth of between 14m to 20m in the location of landfill. Contamination of the groundwater is highly unlikely even though the landfill is unlined. Due to the extreme temperatures leading to high evaporation rates and low rainfall amount, which will contribute to very little leachate to be present in the landfill.</p>	<p>General provisions of the <i>Environmental Protection Act 1986</i>.  <i>Environmental Protection (Unauthorised Discharges) Regulations 2004</i>.</p>





**DECISION TABLE**

Works Approval / Licence section	Condition number W = Works Approval L = Licence	OSC or NSC	Justification (including risk description & decision methodology where relevant)	Reference documents
			No specified conditions relating to point source emissions to groundwater or the monitoring of such emissions are required to be added to the licence.	
<b>Emissions to land including monitoring</b>	Licence conditions 1 - 7.	N/A.	<p><b>Operation</b>  <i>Emission Significance</i> – 2  <i>Socio-political context</i> – Low concern or interest.  <i>Risk Assessment</i> – D – EIPs, other management mechanisms/licence conditions.</p> <p>Details of DER's assessment and decision making are included in Appendix A.</p>	<p>General provisions of the <i>Environmental Protection Act 1986</i>.</p> <p>Environmental Protection (Unauthorised Discharges) Regulations 2004.</p>
<b>Fugitive emissions</b>	N/A.	N/A.	<p><b>Operation</b>  <i>Emission Significance</i> – 1  <i>Socio-political context</i> – No concern or interest.  <i>Risk Assessment</i> – E – No regulation, other management mechanisms.</p> <p>Dust emissions should not be significant during the operation of the landfill. A water truck is used when feasible to control dust during operations and the landfill is only open during daylight hours and the entrance is locked at all other times.</p> <p>No specified conditions relating to fugitive emissions or the monitoring of these emissions are required to be added to the licence.</p>	<p>General provisions of the <i>Environmental Protection Act 1986</i>.</p> <p><i>Environmental Protection (Unauthorised Discharges) Regulations 2004</i>.</p>





**DECISION TABLE**

Works Approval / Licence section	Condition number W = Works Approval L = Licence	OSC or NSC	Justification (including risk description & decision methodology where relevant)	Reference documents
	N/A.	N/A.	<p><b>Operation</b>  <i>Emission Significance</i> – 1  <i>Socio-political context</i> – Low concern or interest.  <i>Risk Assessment</i> – E – No regulation, other management mechanisms.</p> <p>Odour emissions should not be significant during the operation of the landfill. Any odour emitted will be minimal and highly localised. The landfill is located 5km south-west of the township of Pannawonica and 8km north of the Mesa J mine.</p> <p>Conditions on the licence relating to the covering of waste material will assist in eliminating odour emissions. No additional conditions are required to be added to the licence.</p>	General provisions of the <i>Environmental Protection Act 1986</i> .
<b>Noise</b>	N/A.	N/A.	<p><b>Operation</b>  <i>Emission Significance</i> – 1  <i>Socio-political context</i> – No concern or interest.  <i>Risk Assessment</i> – E – No regulation, other management mechanisms.</p> <p>Some noise will be generated during the operation of the landfill however noise levels will comply with the <i>Environmental Protection (Noise) Regulations 1997</i>.</p> <p>No specified conditions relating to noise are required to be added to the licence.</p>	General provisions of the <i>Environmental Protection Act 1986</i> . <i>Environmental Protection (Noise) Regulations 1997</i> .
<b>Monitoring general</b>	N/A.	N/A.	There are no specified conditions on this licence relating to the monitoring of potential emissions.	N/A.



**DECISION TABLE**

Works Approval / Licence section	Condition number W = Works Approval L = Licence	OSC or NSC	Justification (including risk description & decision methodology where relevant)	Reference documents
<b>Monitoring of inputs and outputs</b>	N/A.	N/A.	No conditions are required to be added to the licence. No specified conditions relating to monitoring of inputs and outputs are required to be added to the licence.	N/A.
<b>Process monitoring</b>	N/A.	N/A.	No specified conditions relating to process monitoring are required to be added to the licence.	N/A.
<b>Ambient quality monitoring</b>	N/A.	N/A.	No specified conditions relating to ambient quality monitoring are required to be added to the licence.	N/A.
<b>Meteorological monitoring</b>	N/A.	N/A.	No specified conditions relating to meteorological monitoring are required to be added to the licence.	N/A.
<b>Improvements</b>	N/A.	N/A.	No specified conditions relating to improvements are required to be added to the licence.	N/A.
<b>Information</b>	Licence condition 8.	N/A.	The licence has a condition relating to the submission of an Annual Audit Compliance Report by the 30 April each year.	General provisions of the <i>Environmental Protection Act 1986</i> .

## 5 Advertisement and consultation table

Date	Event	Comments received/Notes	How comments were taken into consideration
20/01/2014	Application advertised in The West Australian	No comments received.	N/A.
14/01/2014	Proponent sent a copy of draft instrument	No comments received.	N/A.





## 6 Emissions and discharges risk assessment framework

Note: These matrix are taken from the DER Officer's Guide to Emissions and Discharges Risk Assessment (2006).

**Table 3: Measures of Significance of Emissions**

Emissions as a percentage of the relevant emission or ambient standard		Worst Case Operating Conditions (95 <sup>th</sup> Percentile)			
		>100%	50 – 100%	20 – 50%	<20%*
Normal Operating Conditions (50 <sup>th</sup> Percentile)	>100%	5	N/A	N/A	N/A
	50 – 100%	4	3	N/A	N/A
	20 – 50%	4	3	2	N/A
	<20%*	3	3	2	1

\*For reliable technology, this figure could increase to 30%

**Table 4: Socio-Political Context of Each Regulated Emission**

		Relative proximity of the interested party with regards to the emission				
		Immediately Adjacent	Adjacent	Nearby	Distant	Isolated
Level of Community Interest or Concern*	5	High	High	Medium High	Medium	Low
	4	High	High	Medium High	Medium	Low
	3	Medium High	Medium High	Medium	Low	No
	2	Low	Low	Low	Low	No
	1	No	No	No	No	No

Note: These examples are not exclusive and professional judgement is needed to evaluate each specific case

\*This is determined by DER using the *Officer's Guide to Emissions and Discharges Risk Assessment* (2006).

**Table 5: Emissions Risk Reduction Matrix**

		Significance of Emissions				
		5	4	3	2	1
Socio-Political Context	High	A	A	B	C	D
	Medium High	A	A	B	C	D
	Medium	A	B	B	D	E
	Low	A	B	C	D	E
	No	B	C	D	E	E

### PRIORITY MATRIX ACTION DESCRIPTORS

A = Do not allow (fix)

B = licence condition (setting limits + EMPs - short timeframes)(setting targets optional)

C = licence condition (setting targets + EMPs - longer timeframes)

D= EIPs, other management mechanisms/licence conditions (monitoring/reporting)/other regulatory tools

E = No regulation, other management mechanisms





## Appendix A

### Emissions to land including monitoring

#### Waste Acceptance

The following procedures are undertaken for waste acceptance:

- identification and quantification of waste;
- components of waste are separated at source to minimise contamination and maximise potential for reuse and recycling;
- a sign at the landfill advises of acceptable and unacceptable wastes;
- non-conforming wastes are not accepted for deposit at the landfill;
- all waste deposited is recorded in a data sheet (Waste Disposal Schedule Pannawonica Landfill Management Plan); and
- random inspections and sampling of waste loads are undertaken.

#### Waste Placement and Compaction

The following is used to manage waste deposition in the landfill:

- a small tipping area is maintained with a maximum 30m face at any one time and tipping area is directed by operator;
- the landfill consists of a series of unlined trenches to be constructed to a maximum depth of 4m. During operation the trenches are progressively backfilled with excavated soil and rock to cover waste;
- waste is not deposited into water;
- all waste is compacted with a minimum of two passes of available machinery (dozers-loaders);
- waste is placed at the base of the constructed trench to avoid windblown litter;
- available machinery is used to compact waste against the rear of the waste trench and covered with soils to contain wastes;
- all special waste is covered immediately and their location is noted and recorded on a registrar located at the Pannawonica town.
- large metal items (generally recycled ) are compacted;
- waste is not burnt;
- all waste on plant equipment is removed prior to leaving the tipping face;
- waste is not discharged beyond the boundary of the site. The landfill is surrounded by a 1.8m high cyclone mesh fence and a 500 millimetre (mm) windrow outside the facility ensures waste is not washed or blown beyond the premises boundary ; and
- a water truck is used when feasible to control dust during operations.

#### Waste Cover Material

Robe River ensures the following:

- there is sufficient cover material at the face for at least two weeks of operation;
- ration the amount of cover placed in the tipping face stockpile to ensure minimal use to comply with requirements but giving maximum economic value of the airspace;
- covering carried out at least weekly with soil or another approved material;
- at the end of each week waste is covered with a layer of cover material of a depth of at least 150mm;
- at the end of each month a layer of no less than 300mm thick of soil or other approved material is used to cover waste;
- no wet material is used as cover;
- no clinical waste is buried at the landfill;
- asbestos; and
  - asbestos materials are disposed of and buried to a depth of 1m under the supervision of a person nominated by Robe River;



- asbestos materials are bagged and labelled according to regulations. Materials are then covered immediately where possible or at least weekly;
  - a register of asbestos disposal is maintained and located at the Pannawonica Town Office; and
  - a plan of the site is maintained and clearly shows the designated area for disposal of asbestos material.
- a fire break is maintained 3m around the site boundary.

#### Post Closure and Rehabilitation

Robe River will incorporate the landfill into the overall mine site closure strategy by:

- mine site and associated infrastructure to be returned to pastoral land use;
- the landfill area is to be capped with material excavated from trenches. All areas will be re-contoured and slopes minimised to reduce erodability;
- capping will be convex to allow for minor settlement and prevention of water ponding;
- water infiltration will be controlled via an installed diversion drain;
- Robe River will conduct annual inspections to assess the effectiveness of the closure strategy for five years then the monitoring frequency will be reviewed; and
- visual monitoring will be carried out on the following:
  - human impact i.e. fire and vandalisms;
  - soil erosion;
  - vegetation degradation; and
  - drainage issues.

#### **Limits/Targets**

Conditions on licence relating to waste acceptance, disposal of asbestos waste, management of landfill activities, windblown waste, uncontaminated stormwater management, firebreaks and signage.

#### **Emissions Monitoring**

No additional conditions are required to be added to the licence.