

# Licence

# Environmental Protection Act 1986, Part V

# Licensee: Coolgardie Mining Company Pty Ltd

### Licence: L8992/2016/1

Registered office:	Suite 3, Level 4 12-20 Flinders Lane MELBOURNE VIC 3000
ACN:	604 724 610
Premises address:	Burbanks Gold Mine Mining tenement M15/161 COOLGARDIE WA 6429 as depicted in Schedule 1.
Issue date:	28 February 2017
Commencement date:	1 March 2017
Expiry date:	28 February 2027

### Prescribed premisescategory

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 to the environment to allow for the mining of ore.	50 000 tonnes or more per year	175,000 tonnes per annual period
89	Putrescible landfill site: premises on which waste is accepted for burial.	More than 20 but less than 5 000 tonnes per year	520 tonnes per annual period

#### Conditions

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

Date signed: 28 February 2017

# Tim Gentle

Officer delegated under section 20 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 regulates 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 theAct.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.

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

Coolgardie Mining Company Pty Ltd (CMC), a wholly owned subsidiary of Kidman Resources Limited (KRL) is the owner of the Burbanks Gold Mine (Burbanks). The mine is located on M15/161, approximately 9 km south of Coolgaride, adjacent Nepean Road. It consists of two open pits (Lade Robinson pit and Christmas pit), an underground mine (Birthday Gift underground), two waste dumps, landfill, workshop and office block. It has been actively mined since 1895 by a number of private and public companies.

KRL acquired Burbanks in April 2015 and recommenced mining of the underground mine in June 2015. Historically, water was pumped either to the Burbanks processing plant (owned by Ramelius Resources Limited) or to Brillian pit (owned by Focus Minerals Limited). Both disposal methods are no longer available. Water abstracted since June 2015 has been used in dust suppression around the site. Ore is currently processed offsite.

CMC currently disposes water via a sprinkler system to the adjacent Christmas pit. The sprinkler system comprises two lines running along the eastern and western wall of the pit. Each line has 17 heavy duty heads capable of spraying at combined rate of 15 litres per second. The maximum spray length and heigh is approximately 20 m and 10 m respectively.

Mine water will also be used underground and at the site workshop. Long-term solutions for water discharge are currently being investigated, including discharge of water to a lined evaporation dam and discharge of water to a nearby pit.

This Licence is the result of an application by the Licensee.

The licences and works approvals issued for the Premises since 14 February 2017 are:

Instrument log		
Instrument	Issued	Description
L8992/2016/1	14 February 2017	New Licence

#### 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



### **Licence conditions**

### 1 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;

'anniversary date' means 15 February in each year;

**'annual audit compliance report'** means a report in a format approved by the CEO as presented by the Licensee or as specified by the CEO from time to time and published on the Department's website.

**'annual period'** means a 12 month period commencing from 15 February until 14 February in the following year;

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

'CEO' for the purpose of correspondence means;

Chief Executive Officer Department Div. 3 Pt. V EP Act Locked Bag 33 Cloisters Square PERTH WA 6850 Email: info@der.wa.gov.au

**'compliance report'** means a report in a format approved by the CEO as presented by the Licensee or as specified by the CEO from time to time and published on the Department's website.

**'department'** means the department established under s.35 of the Public Sector Management Act and designated as responsible for the administration of Division 3 Part V of the *Environmental Protection Act 1986*.

'Licence' means this Licence numbered L8992/2016/1 and issued underthe 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;

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

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



**'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 all pipelines containing mine dewater are provided with secondary containment sufficient to contain any spill for a time period equal to the time between routine inspections.
- 1.2.2 The Licensee shall ensure that any dewatering effluent shall only be discharged to previously mined pits in accordance with the conditions of this Licence.
- 1.2.3 The Licensee shall:
  - (a) undertake inspections as detailed in Table 1.2.1; and
  - (b) maintain a written daily log of all inspections undertaken, including the signature of the responsible person for each 12 hourly inpection.

Table 1.2.1: Inspection of infrastructure			
Scope of inspection	Type of inspection	Frequency of inspection	
Dewatering pipelines	Visual check of pipeline integrity (entire length of pipelines).	12 hourly	
Discharge sprinklers	Visual check to ensure there is no spraying outside of Christmas pit.	12 hourly when operating	

- 1.2.4 The Licensee shall ensure that cover is applied and maintained on landfilled wastes at least monthly to a sufficient depth that ensures waste is completely covered and that no waste is exposed.
- 1.2.5 The Licensee shall ensure that wind-blown waste is returned to the tipping area on at least a fortnightly basis.

### 2 Emissions

### 2.1 General

2.1.1 The Licensee shall record and investigate the exceedance of any descriptive or numerical limitspecified 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         Description         Source including abatement           reference			
Christmas pit	Dewatering via sprinkler system	Water from dewatering of the underground mine through two sprinkler lines sprinkler	



heads.

# 3 Monitoring

### 3.1 Process monitoring

3.1.1 The Licensee shall undertake the monitoring in Table 3.1.1 according to the specifications in that table.

Table 3.1.1: Proce	ss monitoring				
Monitoring point reference	Process description	Parameter	Units	Frequency	Method
Christmas pit	Dewatering discharge	Flow	L/s	Continuous	None specified

### 4 Information

### 4.1 Records

- 4.1.1 All information and records required by theLicence 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 must submit to the CEO within 90 days after the Anniversary Date, a Compliance Report indiciating the extent to which the Licensee has complied with the Conditions in this Licence for the Annual Period.
- 4.1.3 The Licenseeshall 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 within 60 calendar days after the end of the annual period. The report shall contain the information listed in Table 5.2.1 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	
-	Summary of any failure or malfunction of any pollution control equipment and any environmentalincidents that have occurred during the annual period and any action taken	None specified	
Table 3.1.1	Volumes of dewatering discharge	None specified	
4.1.2	Compliance	Compliance Report	
4.1.3	Complaints summary	None specified	



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 reportingperiod)	Format or form
-	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

#### 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 43.1: 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.	N1
		Part B: As soon as practicable	

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

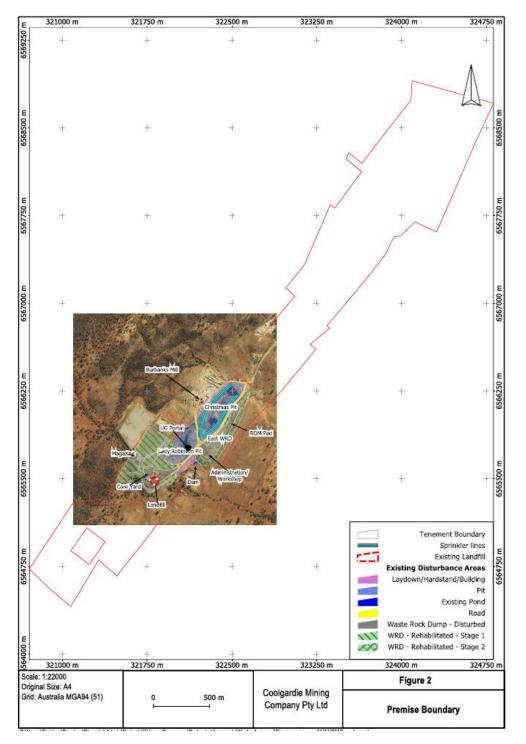
Note 2: Forms are in Schedule 2



# Schedule 1: Maps

### Premises map

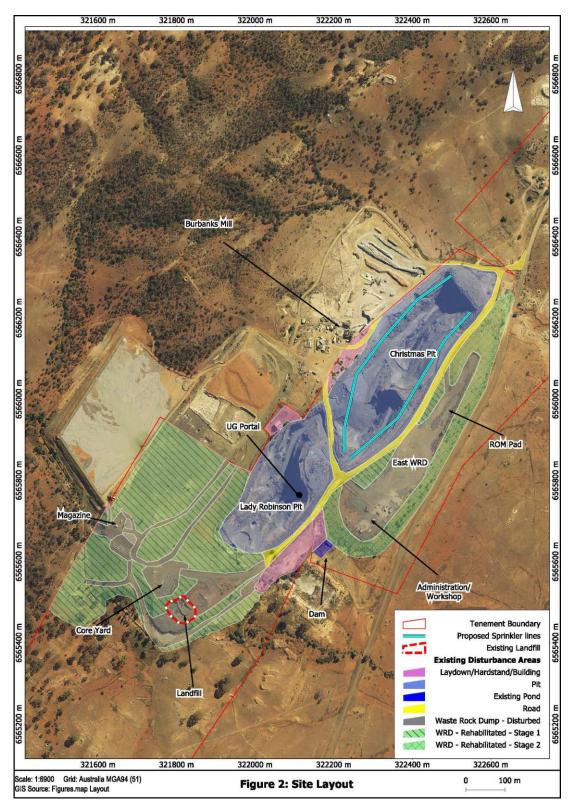
The Premises is shown in the map below. The red line depicts the Premises boundary.





### Map of emission points

The location of the emission point defined in Table 2.2.1, is shown below.





# Schedule 2: Reporting & notification forms

Licence:L8992/2016/1Licensee:Coolgardie Mining Company Pty LtdForm:N1Date of breach:

### Notification of detection of the breach of a limit.

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 circumstances of the emission. Where appropriate, a comparison should be made of actual emissions and authorised emission limits.

### Part A

Licence Number	
Name of operator	
Location of Premises	
Time and date of the detection	

Notification requirements for	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		



### Part B

Any more accurate information on the matters for notification under Part A.	
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	
Coolgardie Mining Company Pty Ltd	
Date	



# **Decision Document**

### Environmental Protection Act 1986, Part V

# Proponent: Coolgardie Mining Company Pty Ltd

Licence: L8992/2016/1

Registered office: Suite 3, Level 4 12-20 Flinders Lane MELBOURNE VIC 3000

ACN: 604 724 610

Premises address: Burbanks Gold Mine Mining tenement M15/161 COOLGARDIE WA 6429

Issue date: 28 February 2017

Commencement date: 1 March 2017

Expiry date: 28 February 2027

#### 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:

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 amendment Works Approval amend	□ □ dment □
Activities that cause the premises to become	Category number(s)	Assessed design capacity
prescribed premises	6	175,000 kL/annum
	89	520 tonnes per annum
Application verified	Date: 18 August 2016	
Application fee paid	Date: 26 October 2016	i
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	R	eferral decision No:
Protection Authority (EPA) under Part IV of the	Yes□ No⊠ M	lanaged under Part V
Environmental Protection Act 1986?		ssessed under Part IV



Is the proposal subject to Ministerial Conditions?	Yes N	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> )?		No⊠ of Wate	r consulted Yes 🗌 No 🗌		
Is the Premises within an Environmental Protection If Yes include details of which EPP(s) here.	Is the Premises within an Environmental Protection Policy (EPP) Area Yes No				
Is the Premises subject to any EPP requirements? If Yes, include details here, eg Site is subject to SC		No⊠ s of Kwi	inana EPP.		

### 3 Executive summary of proposal and assessment

Coolgardie Mining Company Pty Ltd (CMC), a wholly owned subsidiary of Kidman Resources Limited (KRL) is the owner of the Burbanks Gold Mine (Burbanks). The mine is located on M15/161, approximately 9 km south of Coolgardie, adjacent Nepean Road. It consists of two open pits (Lade Robinson pit and Christmas pit), an underground mine (Birthday Gift underground), two waste dumps, landfill, workshop and office block. Figure 2 depicts the site layout. It has been actively mined since 1895 by a number of private and public companies.

KRL acquired Burbanks in April 2015 and recommenced mining of the underground mine in June 2015. Historically, water was pumped either to the adjacent Burbanks processing plant (owned by Ramelius Resources Limited) or to Brillian pit (owned by Focus Minerals Limited). Both disposal methods are no longer available. Water abstracted since June 2015 has been used in dust suppression around the site. Ore is currently processed offsite.

CMC currently disposes water via a sprinkler system to the adjacent Christmas pit. The sprinkler system comprises two lines running along the eastern and western wall of the pit. Each line has 17 heavy duty heads capable of spraying at combined rate of 15 litres per second. The maximum spray length and height is approximately 20 m and 10 m respectively.

Mine water will also be used underground and at the site workshop. Long-term solutions for water discharge are currently being investigated, including discharge of water to a lined evaporation dam and discharge of water to a nearby pit.

CMC hold a Groundwater Licence from the Department of Water, which allows 450,000 kL of water to be abstracted per year (GWL 160862). CMC has also advised that a Mining Proposal was to be submitted to the Department of Mines and Petroleum (DMP) in July 2016. See further comments in Table 5 from DMP regarding a Mining Proposal.

The project is located within the Kangaroo Hills Timber Reserve, which is a gazetted reserve under the *Conservation and Land Management Act 1984*, managed by the Department of Parks and Widlife. The following map (Figure 1) shows the location of the reserve (titled 'recreation' in the key) and the tenement.



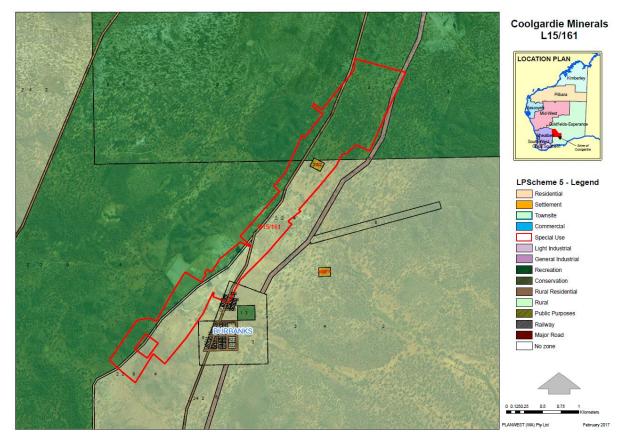
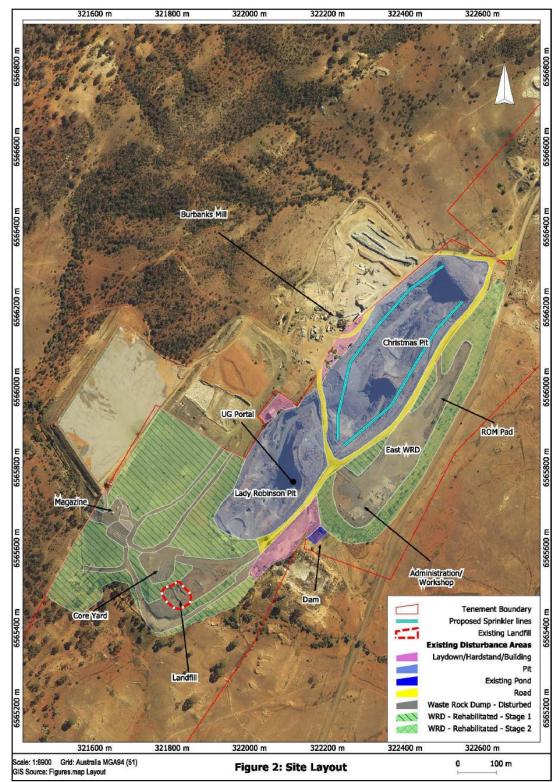
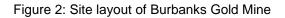


Figure 1: Burbanks Gold Mine and location of Kangaroo Hill Timber Reserve









### 4 Decision table

All applications are assessed in line with the *Environmental Protection Act1986*, 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 TAE	BLE		
Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
Premises operation	L1.2.1 – L1.2.5	Abnormal Operation         Emission Description         Emission: Hypersaline water is transported through pipelines. Emissions will occur if the pipeline leaks or ruptures (e.g. from failure in a flange or weld, from pipeline corrosion, overpressure, operator error, vehicle damage, or damage caused by animals).         Impact: Contamination of surrounding soils with dissolved solids (salts) can cause vegetation stress or death. There are no Threatened Ecological Communities (TECs) or Priority Ecological Communities (PECs) within the project area. The project area is highly disturbed from mining, with sparse vegetation (pastoral grasses and low shrubs) occurring.         The Kangaroo Hills Timber Reserve is located partially within the tenement (depicted in Figure 1) and is managed by the Department of Parks and Wildlife. Kangaroo Hills Timber Reserve contains good examples of un-cut and zone eucalypt woodlands and is for the protection of flora, fauna, landscape and Aboriginal cultural values.         Controls: The pipelines are located within disturbed areas within the pit area, with existing earthen bunding to prevent discharge to any surrounding vegetation. The proponent has committed to inspecting pipelines twice a day whilst pumping is occurring and in the event of a leak, pumping will cease whilst the pipeline is repaired.	Applicant supporting document General provisions of the <i>Environmental</i> <i>Protection Act</i> <i>1986.</i> DER's Guidance Statement: Environmental Siting November 2016



DECISION TAB	LE		
Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
		The proponent has stated that there will be no impact on the timber reserve, as all the mining areas are within areas of no or sparse vegetation. The Department of Mines and Petroleum have imposed Tenement Conditions on M15/161 regarding the reserve which the proponent must adhere to.	
		Given the bunding of the pipeline, and the additional management controls committed to by the proponent, the risk likelihood has been assessed as 'unlikely' and the consequence as 'minor'.	
		Risk Assessment Consequence: Minor Likelihood: Unlikely Risk Rating: Moderate	
		Regulatory Controls The proponent's commitment for 12 hourly visual inspections for pipeline integrity has been made binding through a licence condition.	
		Residual Risk Consequence: Minor Likelihood: Unlikely Risk Rating: Moderate	
		Abnormal Operations <i>Emission</i> : Hypersaline water is discharged into Christmas pit from the underground mine via a sprinkler system. This consists of two pipelines running along the eastern and western wall of the pit, with each line having 17 heavy duty heads, capable of spraying a combined rate of 15 litres per second. The maximum spray length is 20 m and height is 10 m. Spray could be carried by the wind to areas outside of the approved discharge area and onto surrounding vegetation.	

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DECISION TAE	BLE		
Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
		<i>Impact</i> : The quality of the water is approximately 30,000 mg/L total dissolved solids (TDS). This can have detrimental impacts on any surrounding vegetation and soils.	
		<i>Controls</i> : The proponent has committed to angling the sprinkler heads to ensure that all water is contained within the pit. They have also stated that in the event that water is observed spraying outside of the pit, the sprinkler system will be shut down.	
		Risk Assessment Consequence: Minor Likelihood: Unlikely Risk Rating: Moderate	
		Regulatory Controls Condition 1.2.3 has been included to require a daily visual inspection of the operating sprinklers to ensure no spraying occurs outside of the pit.	
		Residual Risk Consequence: Minor Likelihood: Unlikely Risk Rating: Moderate	
		<b>Normal Operations</b> <i>Emission</i> : Inert and putrescible waste is disposed of in the existing landfill, located within the waste rock dump.	
		<i>Impact.</i> The disposal of putrescible waste has the potential to cause leachate into surrounding groundwater. If not managed appropriately, fly-away litter could be detrimental to surrounding fauna and flora. Stormwater may also become contaminated. Putrescible waste may also attract rodents and cats which may then	

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DECISION TAE	BLE		
Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
		have detrimental impacts on fauna and bird life in the adjacent Kangaroo Hills Timber Reserve. The Kangaroo Hills Timber Reserve is located partially within the tenement (depicted in Figure 1). The Reserve contains good examples of un-cut and zone eucalypt woodlands and is for the protection of flora, fauna, landscape and Aboriginal cultural values.	
		<i>Controls</i> : The proponent has committed to managing the landfill via the following methods:	
		<ul> <li>The landfill is located within the waste rock dump, therefore the distance to groundwater is greater than 70 m below ground level.</li> <li>Any windblown waste will be collected and returned to the tipping area;</li> <li>Waste will be covered with 150 mm minimum of cover material monthly;</li> <li>Stormwater is diverted away from the landfill through the grading of surface and earthen bunds;</li> <li>Relevant signage is in place listing types of waste to be accepted.</li> </ul>	
		Risk Assessment Consequence: Moderate Likelihood: Possible Risk Rating: Moderate	
		Regulatory Controls Two licence conditions have been included to manage the activity of landfilling. They are 1.2.4 and 1.2.5. They will ensure that, on at laest a weekly basis, appropriate cover material is applied to the landfill and that any wind-blown waste is collected and returned to the landfill,	
		Residual Risk Consequence: Moderate	



DECISION TAB	LE		
Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
		Likelihood: Unlikely Risk Rating: Moderate	
Emissions general	L2.1.1	General emission conditions will be included in the Licence to ensure any limit exceeded is recorded and investigated.	N/A
Point source emissions to air including monitoring	N/A	There are no point source emissions to air which occur via the dewatering operations and landfill. No conditions are required.	N/A
Point source emissions to surface water including monitoring	N/A	There are no point source emissions to surface water associated with the dewatering operations and landfill. No conditions are required. The nearest surface water body to the project is Brown Lake, located approximately 12 km to the north east of the site.	N/A
Point source emissions to groundwater including monitoring	L2.2.1 L3.2.1	Emission Description         Emission: Water from the underground pit is disposed via a sprinkler system into         Christmas pit through two pipelines which run along the eastern and western walls of the pit.         Impact: Potential mounding of the water table in the vicinity of the receiving Christmas	Applicant supporting document General provisions of the
		Pit with impacts to adjacent vegetation through inundation of roots. Possible overtopping in the event of heavy rainfall with spillage of pit lake water onto the ground surface around the pit causing contamination and vegetation impacts. Possible subsurface lateral movement of pit lake water through higher transmissivity rock strata resulting in contamination of lower salinity perched groundwater (if present) adjacent to the pit.	Environmental Protection Act 1986. DER's Guidance Statement: Environmental
		There are no Threatened Ecological Communities (TECs) or Priority Ecological Communities (PECs) within the project area. The project area is highly disturbed from	Siting November 2016



			<b>D</b> (
Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
		mining, with sparse vegetation (pastoral grasses and low shrubs) occurring. The Kangaroo Hills Timber Reserve is the closest Specified Ecosystem, the tenement is located within the reserve. Kangaroo Hills Timber Reserve contains good examples of un-cut and zone eucalypt woodlands and is for the protection of flora, fauna, landscape and Aboriginal cultural values.	
		<i>Controls</i> : The aquifer at the source of the dewater and at the discharge point are the same, therefore there is no risk of contamination of groundwater. Christmas pit has a depth of approximately 60 m and an estimated capacity of about 1,800,000 m <sup>3</sup> . Through evaporation and seepage, the pit lake remains low and no higher than 15 m above the pit base.	
		The proponent has advised that monitoring for pH, ED and TDS can be carried out quarterly if required.	
		Risk Assessment Consequence: Minor Likelihood: Unlikely Risk Rating: Moderate	
		Regulatory Controls Condition 2.2.1 allows the emission to Christmas pit to occur. Process monitoring through condition 3.2.1 will ensure volumes of water discharged are recorded to ensure it remains within the annual limit. Although the timber reserve is situated to the western side of the mine, the Burbanks Gold Mine is directly adjacent to the a separate prescribed premises, the Burbanks Processing Plant (depicted in Figure 2). This area is highly disturbed and includes a processing plant and tailings storage facility. Given the proximity of the site to the Burbanks Processing Plant and the pit lake depth, no water quality monitoring is warranted.	



DECISION TABL	_E		
Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
		Residual Risk	
		Consequence: Minor Likelihood: Rare	
		Risk Rating: Low	
Emissions to land including monitoring	N/A	There will be no emissions to land associated with the dewatering operations and landfill. No conditions are required.	N/A
Fugitive emissions	N/A	Fugitive emissions are not expected to be generated during the operation of the dewatering pipelines. Some fugitive dust may occur through the operation of the landfill. Any fugitive dust emissions will be managed by the use of water carts. The substantive offences of the <i>Environmental Protection Act 1986</i> provide enforceable prohibitions for dust emissions that result in pollution or environmental harm. No conditions are required for the Works Approval or Licence.	General provisions of the <i>Environmental</i> <i>Protection Act</i> 1986.
Odour	N/A	Odour emissions will not occur from the dewatering operation. Odour associated with the landfill will be adequately managed by the frequent covering of material which is stipulated as a condition under condition 1.2.4. As the nearest sensitive receptor is Coolgardie, 9 km away, the Delegated Officer is satisfied that no further conditions relating specifically to odour are required.	General provisions of the <i>Environmental</i> <i>Protection Act</i> 1986.
Noise	N/A	There may be some operational noise associated with the mine. However, as the nearest sensitive receptor is Coolgardie, 9 km away no specific conditions relating to noise apply. The substantive offences of the <i>Environment Protection (Noise) Regulations</i> provide enforceable prohibition for unreasonable noise emissions.	Environmental Protection (Noise) Regulations
Monitoring general	N/A	No general monitoring conditions are required.	N/A
Monitoring of inputs and outputs	N/A	No monitoring of inputs or outputs is required for the dewatering and landfill operations.	N/A



DECISION TABLE					
Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents		
Process monitoring	L3.1.1	No process monitoring is required for the landfill operations. Process monitoring for the dewatering via the sprinkler system is required to record volumes of water discharged.	N/A		
Ambient quality monitoring	N/A	No ambient quality monitoring is required for the dewatering and landfill operations.	N/A		
Meteorological monitoring	N/A	No meteorological monitoring is required for the dewatering and landfill operations.	N/A		
Improvements	N/A	No improvements are required for the licence.	N/A		
Information	L4.1 – L4.3	Conditions regarding information have been included in the Licence regarding record keeping and to outline reporting and notification requirements.	N/A		
Licence Duration	N/A	The duration of the Licence will be until 2027. This is in line with the expiry date of the mining tenement.	DER's Guidance Statement on Licence Duration.		



### 5 Advertisement and consultation table

Date	Event	Comments received/Notes	How comments were taken into consideration
07/11/2016	Application advertised in West Australian (or other relevant newspaper)	No comments received	N/A
07/11/2016	Application referred to interested parties listed: Shire of Coolgardie Department of Mines and Petroleum	Comments received: Shire of Coolgardie advised that any mine dewatering on Recreation land should be avoided unless there are adequate provisions for rehabilitation; and The putrescible waste site is a health issue and should not be in the Recreation area. As the landfill is not mining related it will need a Development Application. Department of Mines and Petroleum advised that two Mining Proposals were withdrawn in 2016 and should the proponent wish to dewater, they are required to submit a Mining Proposal.	There is no dewatering or disposal of putrescible waste proposed to occur on recreation land. The landfill is mining related and regulated through the current licence. Noted.
15/12/2016	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	1:	Emissions	Risk	Matrix
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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