



Licence

Environmental Protection Act 1986, Part V

Licence Holder: Kimba Resources Pty Ltd

Licence: L8964/2016/1

Registered office: Level 2
38 Richardson Street
WEST PERTH WA 6005

ACN: 166 954 525

Premises address: Williamson Gold Mine
Mining tenements M53/797 and M53/798
WILUNA WA 6646
as depicted in Schedule 1.

Issue date: 22 June 2018

Commencement date: 26 June 2018

Expiry date: Sunday, 20 November 2022

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	1,115,000 tonnes per annual period

Conditions

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

Date signed: 22 June 2018

.....
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.

DWER's industry licensing role

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

DWER has responsibilities under Part V of the *Environmental Protection Act 1986* (the Act) for the licensing of prescribed premises. Through this process DWER regulates to prevent, control and abate pollution and environmental harm to conserve and protect the environment. DWER 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/Licence Holder 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:
<http://www.slp.wa.gov.au/legislation/statutes.nsf/default.html>

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

The Williamson Gold Mine is owned by Kimba Resources Pty Ltd (Kimba), a wholly owned subsidiary of Blackham Resources Ltd. Williamson Pit is located approximately 22 kilometers south of the town of Wiluna and 18 km from the Wiluna Gold Mine. It lies within the Lake Way playa on mining tenements M53/797 and M53/798. The Williamson Pit was previously mined from June 2005 to October 2006 by Agincourt Resources Ltd. Ore was transported from the pit via a dedicated causeway and haul road across the lake bed and north to the Wiluna Gold Mine for processing.

Dewatering was undertaken to access the ore, with the mine water discharged to Lake Way. The discharge was authorised under Licence L5206/1987/8 (and 9). The site has remained in care and maintenance since 2006. Mining is currently scheduled to re-commence in the first quarter 2019 and continue for approximately two years, based on current resource estimates.

Kimba are planning to re-commence dewatering of the Williamson Pit and discharge the mine water to Lake Way. An annual dewatering and discharge rate of 1,115,000 kL is proposed.

This Licence is for the operation of a new facility established under works approval W5968/2016/1.

The licences and works approvals issued for the Premises since 23/06/2016 are:

Instrument log		
Instrument	Issued	Description
W5968/2016/1	23/06/2016	Works approval to construct and assess dewatering infrastructure
L8964/2016/1	22/06/2018	New licence for dewatering operation to Lake Way

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*;

'annual period' means the inclusive period from 1 January until 31 December in the same year;

'AS/NZS 5667.4' means the Australian Standard AS/NZS 5667.4 *Water Quality – Sampling – Guidance on sampling from lakes, natural and man-made*;

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

'CEO' means Chief Executive Officer of the Department of Water and Environmental Regulation;

'CEO' for the purpose of correspondence means;

Director General
Department Administering the *Environmental Protection Act 1986*
Locked Bag 33
CLOISTERS SQUARE WA 6850
Email: info@dwer.wa.gov.au

'Compliance report' means a report in a format approved by the CEO as presented by the Licence Holder or as specified by the CEO (guidelines and templates may be available on the Department's website).

'Licence' means this Licence numbered L8964/2016/1 and issued under the Act;

'Licence Holder' means the person or organisation named as Licence Holder 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;

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

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

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

'six monthly' means the 2 inclusive periods from 1 January to 30 June and 1 July to 31 December in the following year;



‘spot sample’ means a discrete sample representative at the time and place at which the sample is taken;

‘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 Licence Holder shall ensure that all pipelines containing saline water are either:

- (a) equipped with telemetry systems and pressure sensors along pipelines to allow the detection of leaks and failures; or
- (b) equipped with automatic cut-outs in the event of a pipe failure; and/or
- (c) provided with secondary containment sufficient to contain any spill for a period equal to the time between inspections.

1.2.2 The Licence Holder shall ensure that saline dewatering effluent shall only be discharged to Lake Way in accordance with the conditions in section 2 of this Licence.

1.2.3 The Licence Holder shall ensure that saline water is only discharged into containment cells or ponds with the relevant infrastructure requirements and at the locations specified in Table 1.2.1.

Table 1.2.1: Containment infrastructure

Storage vessel or compound	Material	Requirements
Water settling pond	Mine dewater	Lined to a permeability of $<10^{-9}$ m/s or equivalent

1.2.4 The Licence Holder 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; and
- (c) maintain a record of all inspections undertaken, with each inspection record signed by the responsible person.

Table 1.2.2: Inspection of infrastructure

Scope of inspection	Type of inspection	Frequency of inspection
Mine dewater pipelines	Visual integrity	Daily when operating or weekly when not operating.
Internal embankment freeboard of water settling ponds	Visual to confirm required freeboard capacity is available	



2 Emissions

2.1 General

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

2.2 Point source emissions to surface water

- 2.2.1 The Licence Holder shall ensure that where waste is emitted to surface water from the emission points in Table 2.2.1 it is done so in accordance with the conditions of this Licence.

Table 2.2.1: Emission points to surface water		
Emission point reference	Description	Source including abatement
Lake Way discharge site	Discharge into Lake Way via discharge pipeline	Mine dewatering effluent from Williamson Pit via settling pond. Abatement includes a settling pond to reduce sediment loading, erosion and scouring impacts. The settling pond must be maintained to ensure sufficient retention time to maximise the removal of suspended solids prior to discharge to Lake Way.

- 2.2.2 The Licence Holder shall not cause or allow point source emissions to surface water greater than the limits listed in Table 2.2.2.

Table 2.2.2: Point source emission limits to surface water			
Emission point reference	Parameter	Limit (including units)	Averaging period
Lake Way discharge site	Volume	1,115,000 kL per year	Annually
	Total suspended solids	80 mg/L total suspended solids	Monthly spot sample

3 Monitoring

3.1 General monitoring

- 3.1.1 The Licence Holder shall ensure that:
- all water samples are collected and preserved in accordance with AS/NZS 5667.1;
 - all surface water sampling is conducted in accordance with AS/NZS 5667.4, AS/NZS 5667.6 or AS/NZS 5667.9 as relevant;
 - all sediment sampling is conducted in accordance with AS/NZS 5667.12;
 - all laboratory samples are submitted to and tested by a laboratory with current NATA accreditation for the parameters being measured.
- 3.1.2 The Licence Holder shall ensure that :
- monthly monitoring is undertaken at least 15 days apart;
 - quarterly monitoring is undertaken at least 45 days apart;
 - six monthly monitoring is undertaken at least 5 months apart; and
 - annual monitoring is undertaken at least 9 months apart.



3.2 Monitoring of point source emissions to surface water

3.2.1 The Licence Holder 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 surface water

Emission point reference	Parameter	Units	Frequency
Lake Way Discharge Point	Volume	kL	Cumulative Monthly
Water from the mine dewatering program discharged to Lake Way: WP1, WP2, WP3, WP4, WP5, WP6 and WP7	pH ¹	-	Monthly
	Total dissolved solids	mg/L	Quarterly
	Total suspended solids		
	Antimony, arsenic, cadmium, chromium, copper, lead, manganese, nickel, selenium, thallium and zinc		

Note 1: In-field non-NATA accredited analysis permitted.

3.3 Ambient environmental quality monitoring

3.3.1 The Licence Holder shall undertake the monitoring in Table 3.3.1 and Table 3.3.2 according to the specifications in those tables.

Table 3.3.1: Monitoring of ambient surface water quality

Emission point reference	Parameter	Units	Frequency
Control sites: LW1, LW2, LW3	pH ¹	-	Monthly
	Total dissolved solids	mg/L	Quarterly
	Total suspended solids		
	Antimony, arsenic, cadmium, chromium, copper, lead, manganese, nickel, selenium, thallium and zinc		

Note 1: In-field non-NATA accredited analysis permitted.

Table 3.3.2: Monitoring of ambient sediment quality

Monitoring point reference and location	Parameter	Units	Averaging period	Frequency
LW1, LW2, LW3 WP1, WP2, WP3, WP4, WP5, WP6 and WP7	Antimony, arsenic, cadmium, chromium, lead, copper, manganese, nickel, selenium, thallium and zinc	mg/kg	Spot sample	Six monthly

3.3.2 The Licence Holder shall complete an annual dewatering discharge report that assesses potential environmental impacts associated with the mine dewater discharge. The assessment shall include:

- description of the receiving environment of Lake Way, including lake geology, topography, hydrological processes, sediment and water quality and flora and fauna;
- report on the dewatering discharge volumes and water quality from the Premises;
- salt and water balance estimates for the reporting period in relation to the addition of the dewatering discharge from the Premises to Lake Way;
- an assessment of the impact of the discharge on the receiving environment with comparison of impacted monitoring sites against non-impacted monitoring sites;



- (e) an assessment of current results as compared to previous reporting periods; and
- (f) summary of findings, conclusions and any recommendations for the improvement of the monitoring program and/or modifications for management of the discharge to reduce impact.

4 Improvements

4.1 Improvement program

- 4.1.1 The Licence Holder shall complete the improvements in Table 4.1.1 by the date of completion in Table 4.1.1.

Table 4.1.1: Improvement program		
Improvement reference	Improvement	Date of completion
IR1	The Licence Holder shall submit to the CEO a monitoring plan to conduct an annual assessment of the ecological impacts associated with the mine dewater discharge to Lake Way. The plan shall assess diversity, abundance and function of benthic microalgae and aquatic invertebrate species at control and impacted sites at Lake Way.	3 months from issue date
IR2	The Licence Holder shall review the monitoring sites as selected for Table 3.3.1 and Table 3.3.2 for adequacy and representativeness so as to achieve the objective of condition 3.3.1. The Licence Holder shall submit the findings of their review to the CEO including recommendations for change, if warranted.	3 months from issue date

5 Information

5.1 Records

- 5.1.1 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.
- 5.1.2 The Licence Holder must submit to the CEO, no later than 90 days after the end of the annual period, a Compliance Report indicating the extent to which the Licence Holder has complied with the Conditions in this Licence for the preceding annual period.
- 5.1.3 The Licence Holder must record the number and details of any complaints received by the Licence Holder relating to its obligations under this Licence and its compliance with Part V of the EP Act at the Premises, and any action taken by the Licence Holder in response to the complaint. Details of complaints must include:
- (a) an accurate record of the concerns or issues raised, for example a copy of any written complaint or a written note of any verbal complaints made;
 - (b) the name and contact details of the complainant, if provided by the complainant;
 - (c) the date of the complaint; and
 - (d) the details and dates of the actions taken by the Licence Holder in response to the complaints.



5.2 Reporting

5.2.1 The Licence Holder shall submit to the CEO an Annual Environmental Report within 90 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 5.2.1: Annual Environmental Report		
Condition or table (if relevant)	Parameter	Format or form ¹
-	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 point source emissions to surface water	None specified
Table 3.3.1	Monitoring of ambient water quality	None specified
Table 3.3.2	Monitoring of ambient sediment	None specified
3.3.2	Dewatering discharge report	None specified
5.1.2	Compliance	Annual Audit Compliance Report (AACR)
5.1.3	Complaints summary	None specified

Note 1: Forms are in Schedule 2

5.2.2 The Licence Holder shall ensure that the Annual Environmental Report also contains an assessment of the information contained within the report against previous monitoring results and Licence limits.

5.2.3 The Licence Holder shall submit the information in Table 5.2.2 to the CEO according to the specifications in that table.

Table 5.2.2: Non-annual reporting requirements				
Condition or table (if relevant)	Parameter	Reporting period	Reporting date (after end of the reporting period)	Format or form ¹
-	Copies of original monitoring reports submitted to the Licence Holder by third parties	Not Applicable	Within 14 days of the CEO's request	As received by the Licence Holder from third parties

Note 1: Forms are in Schedule 2

5.3 Notification

5.3.1 The Licence Holder shall ensure that the parameters listed in Table 5.3.1 are notified to the CEO in accordance with the notification requirements of the table.

Table 5.3.1: Notification requirements			
Condition or table (if relevant)	Parameter	Notification requirement ¹	Format or form ²
-	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

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

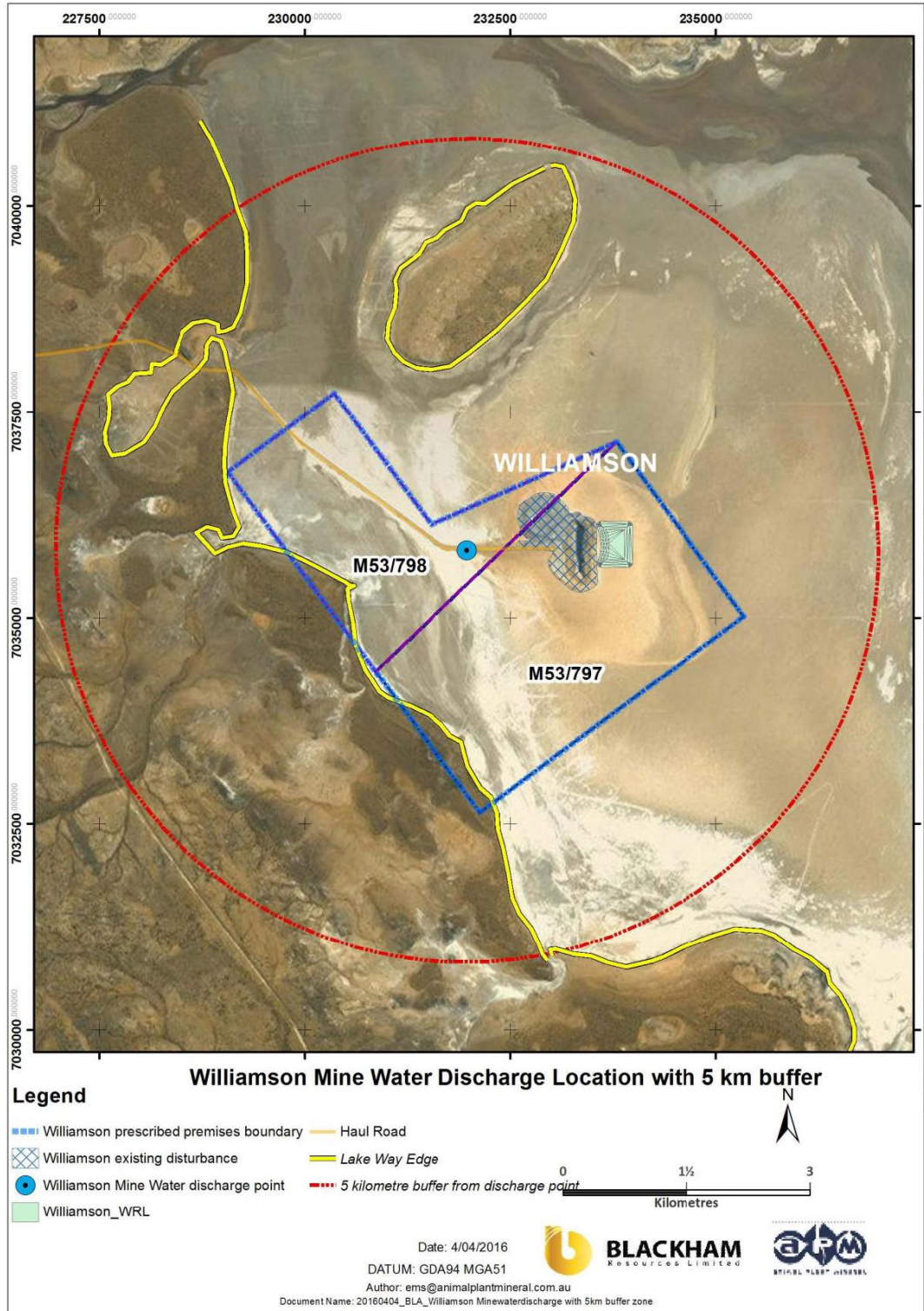
Note 2: Forms are in Schedule 2



Schedule 1: Maps

Premises map

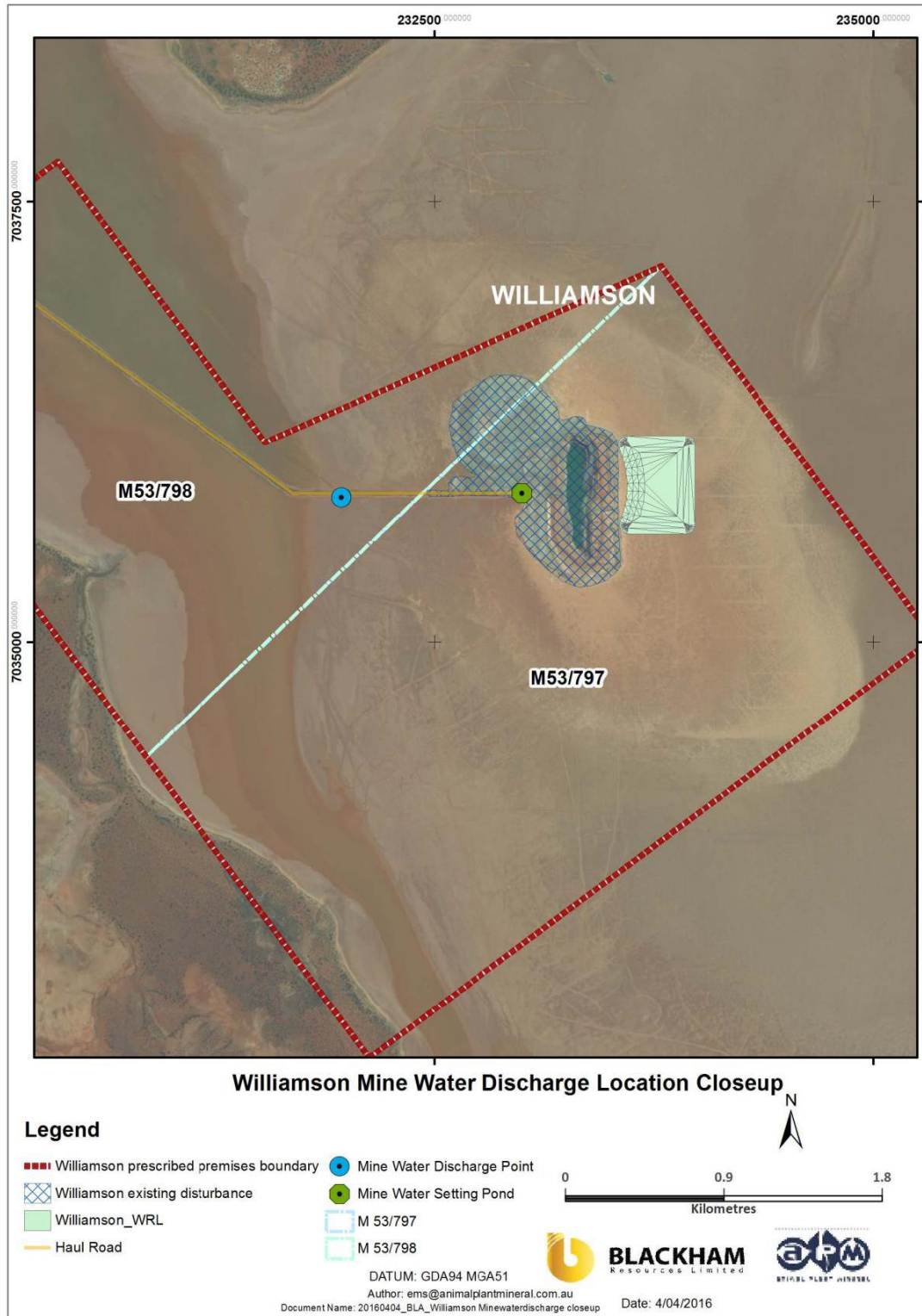
The Premises is shown in the map below. The blue line depicts the Premises boundary.





Map of emission points

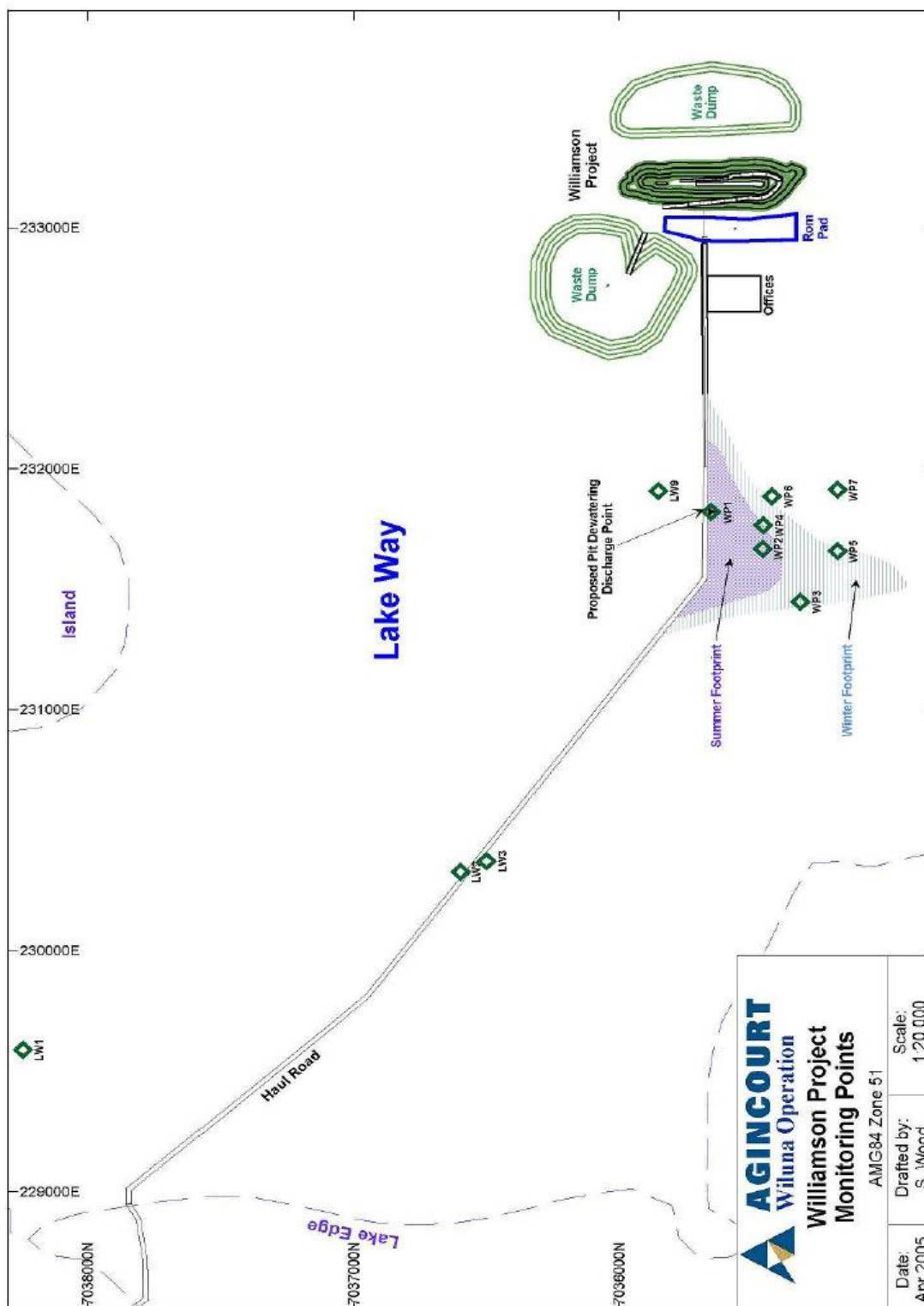
The locations of the emission point defined in Table 2.2.1 is shown below.





Map of monitoring locations

The locations of the monitoring points defined in Table 3.3.1 and Table 3.3.2 are shown below.





Schedule 2: Forms

Licence: L8964/2016/1
Form: N1

Licence Holder: Kimba Resources Pty Ltd
Date 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 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 Kimba Resources Pty Ltd	
Date	



Decision Document

Environmental Protection Act 1986, Part V

Proponent: Kimba Resources Pty Ltd

Licence: L8964/2016/1

Registered office: Level 2
38 Richardson Street
WEST PERTH WA 6005

ACN: 166 954 525

Premises address: Williamson Gold Mine
Mining tenements M53/797 and M53/798
WILUNA WA 6646

Issue date: 22 June 2018

Commencement date: 26 June 2018

Expiry date: Sunday, 20 November 2022

Decision

Based on the assessment detailed in this document the Department of Water and Environmental Regulation (DWER), has decided to issue a licence. DWER 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/ Louise Lavery
Licensing Officer

Decision Document authorised by: Tim Gentle
Delegated Officer



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1 Purpose of this Document

This decision document explains how DWER has assessed and determined the application and provides a record of DWER's decision-making process and how relevant factors have been taken into account. Stakeholders should note that this document is limited to DWER'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 <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	Category number(s)	Assessed design capacity
	6	1,115,000 kL per year
Application verified	Date: 18 April 2016	
Application fee paid	Date: 18 May 2016	
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 type="checkbox"/>	
Commercial-in-confidence claim outcome		
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 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 ₂ requirements of Kwinana EPP.		

3 Executive summary of proposal and assessment

The Williamson Gold Mine is owned by Kimba Resources Pty Ltd (Kimba), a wholly owned subsidiary of Blackham Resources Ltd. Williamson Pit is located approximately 22 kilometres south of the town of Wiluna and 18 km from the Wiluna Gold Mine. It lies within the Lake Way playa on mining tenements M53/797 and M53/798. The Williamson Pit was previously mined from June 2005 to October 2006 by Agincourt Resources Ltd. Ore was transported from the pit via a dedicated causeway and haul road across the lake bed and north to the Wiluna Gold Mine for processing.

Dewatering was undertaken to access the ore, with the mine water discharged to Lake Way. The discharge was authorised under Licence L5206/1987/8 (and 9). The site has remained in care and maintenance since 2006. Mining is currently scheduled to re-commence in the first quarter 2019 and continue for approximately two years, based on current resource estimates.

Kimba are planning to re-commence dewatering of the Williamson Pit and discharge the mine water to Lake Way. An annual dewatering and discharge rate of 1,115,000 kL is proposed.



4 Decision table

All applications are assessed in line with the *Environmental Protection Act 1986*, the *Environmental Protection Regulations 1987* and DWER'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 TABLE			
Works Approval / Licence section	Condition number W = Works Approval L = Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
General conditions	L1.1.3 – 1.1.5	Standard general conditions will be imposed on the Licence.	Application supporting documentation
Premises operation	L1.2.1 – 1.2.3	<p><u>Abnormal Operation</u> Emission Description <i>Emission:</i> Potential hypersaline water spills from the dewatering pipeline. <i>Impact:</i> Potential damage to surrounding soils and vegetation. As the pipeline is laid across the causeway on Lake Way, any hypersaline spills are considered low risk <i>Controls:</i> Kimba Resources has committed to monitoring as per licence conditions.</p> <p><u>Risk Assessment</u> <i>Consequence:</i> Insignificant <i>Likelihood:</i> Unlikely <i>Risk Rating:</i> Low</p> <p><u>Regulatory Controls</u> Conditions will be included in the Licence to manage pipelines containing hypersaline water.</p> <p><u>Residual Risk</u> <i>Consequence:</i> Insignificant</p>	Application supporting documentation General provisions of the <i>Environmental Protection Act 1986</i>



DECISION TABLE			
Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
		<i>Likelihood:</i> Unlikely <i>Risk Rating:</i> Low	
Emissions general	L2.1.1	Numerical limits will be set through condition 2.2.2 of the Licence and therefore condition regarding recording and investigation of exceedances of limits has been included.	N/A
Point source emissions to air including monitoring	No conditions	No point source emissions to air are expected from the construction or operation of the dewatering pipelines. No conditions for the Licence are required.	General provisions of the <i>Environmental Protection Act 1986</i>
Point source emissions to surface water including monitoring	L2.2 and L3.2	DWER's assessment and decision making are detailed in Appendix A.	Application supporting documentation General provisions of the <i>Environmental Protection Act 1986</i>
Point source emissions to groundwater including monitoring	No conditions	<u>Operation</u> No point source emissions to groundwater are expected from the construction or operation of the dewatering pipelines. No conditions for the Licence are required.	General provisions of the <i>Environmental Protection Act 1986</i>
Emissions to land including monitoring	No conditions	<u>Operation</u> No point source emissions to land are expected from the construction or operation of the dewatering pipelines. No conditions for the Licence are required.	General provisions of the <i>Environmental Protection Act 1986</i>



DECISION TABLE			
Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
Fugitive emissions	No conditions	<u>Operation</u> Fugitive dust emissions are not expected to occur during the construction or operation of the dewatering pipeline. No conditions are required for the Licence. The substantive offenses of the <i>Environmental Protection Act 1986</i> provide enforceable prohibitions for dust emissions that result in pollution or environmental harm.	General provisions of the <i>Environmental Protection Act 1986</i>
Odour	No conditions	<u>Operation</u> No odour emissions are expected from the construction or operation of the dewatering pipelines. No conditions for the Licence are required.	General provisions of the <i>Environmental Protection Act 1986</i>
Noise	No conditions	<u>Operation</u> No noise emissions are expected from the construction or operation of the dewatering pipelines. The nearest noise sensitive receptor to the site is the town of Wiluna, approximately 22 km away. No conditions for the Licence are required.	General provisions of the <i>Environmental Protection Act 1986</i>
Monitoring general	L3.1.1 – 3.1.2	General monitoring conditions will be included in the Licence to support monitoring relating to point source surface water emissions and ambient sediment monitoring.	Australian Standard AS/NZS 5667.1 – Water Quality – Sampling – Guidance on the Design of sampling programs, sampling techniques and the preservation and handling of samples



DECISION TABLE			
Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
Monitoring of inputs and outputs	No conditions	No monitoring of inputs and outputs is required for the Licence.	N/A
Process monitoring	No conditions	No process monitoring is required for the Licence.	N/A
Ambient quality monitoring	L3.3.1 L3.3.2 L4.1.1	Ambient quality monitoring of sediment will be required during operation to monitor the impact of the discharge to Lake Way. DWER's assessment and decision making are detailed in Appendix A.	General provisions of the <i>Environmental Protection Act 1986</i>
Meteorological monitoring	No conditions	No meteorological monitoring is required for the Licence.	N/A
Improvements	L4.1.1	<p>IR 1 and IR 2 are required to:</p> <ul style="list-style-type: none"> add assessment and monitoring of potential ecological impacts to the dewatering discharge monitoring program; and confirm the appropriateness of monitoring sites selected for condition 3.3.1, given these monitoring points were last used in the monitoring program issued under L5206/1987/8 in 2005, issued to the previous Licensee Agincourt Resources Limited. <p>DWER's assessment and decision making are detailed in Appendix A.</p>	<p>Outback Ecology (2006) <i>Dewatering Discharge License Report Jan 2005 – Dec 2005</i></p> <p>DWER Licence L5206/1987/8</p>
Information	L4.1.1 – 4.1.3 L4.2.1 – 4.2.3 L4.3.1	Conditions relating to the management of records and complaints, notification requirements and the submission of an Annual Audit Compliance Report and Annual Environmental Report are included in the Licence.	N/A
Licence Duration	No conditions	Based on the Guidance Statement on Licence Duration, the Licence will be valid for a period of 6 years, consistent with the expiry date of tenement M53/797.	DWER's Guidance Statement on Licence Duration



5 Advertisement and consultation table

Date	Event	Comments received/Notes	How comments were taken into consideration
30/05/2016	Application advertised in West Australian (or other relevant newspaper)	None	N/A
30/05/2016	Application referred to interested parties listed - Shire of Wiluna; - Department of Mines and Petroleum	- Shire: no comment - Department of Mines and Petroleum (DMP) advised that the project had been assessed by DMP and a Mining Proposal approved for Williamson Mine.	Noted.
24/05/2016	Applicant sent a copy of draft instrument	No comments received.	N/A
11/06/2018	Following submission of works approval compliance documents, draft instrument updated and sent to Applicant for 21 day consultation period.	No comments received and waiver submitted.	N/A



6 Risk Assessment

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



Appendix A

Point source emission to surface water

Normal Operation

Emission Description

Emission: Williamson Pit currently has a calculated volume of 1,114,120 kL of water, the majority of which requires removing to re-commence mining. It is proposed to dewater the pit over an eighteen month period, with an annual rate of 735,000 kL. However, to account for the 380,000 kL/annum of inflow, an annual dewatering discharge rate of 1,115,000 kL is proposed by Kimba Resources. The water will be discharged to Lake Way. The water quality of the pit lake is hypersaline with salinity ranging from 280 000 mg/L TDS to 290 000 mg/L TDS.

Impacts: A total of 318 000 tonnes per annum of salt will be discharged to Lake Way salt lake. Lake Way is an extensive salt lake system, covering an area of approximately 270 km². The salt lake system joins a regionally extensive salt lake chain draining south east during flood periods linking Lake Maitland and Lake Carey.

The dewatering effluent is hypersaline and of a similar quality to that of the lake, therefore there is very low risk of surface water contamination. The greatest impacts may occur as a result of additional salt deposition on the lake's surface, decreasing the opportunity for the halite salt crust to be dispersed in heavy rainfall events and extending the periods at which aquatic invertebrates such as brine shrimp remain dormant.

Controls: Kimba Resources is anticipating that impacts associated with discharging mine dewater to Lake Way to be low. Water will be pumped from the pit to a settling pond adjacent to the pit, before being pumped to a drainage channel and recovery channel along the causeway. The settling pond and drainage channel allow sediment settling and a small amount of evaporation. After settling, water will be pumped directly onto the lake surface from the causeway.

Discharged water will rapidly either penetrate to the water level or will form a broad, shallow pool where it is expected to evaporate and have minimal impact on lake bed hydrology or hydrochemistry. The discharge footprint is expected to be 12.25 ha in summer and 30.25 ha in winter.

Previous studies, conducted as conditions of the previous licence, have determined the impacts of the dewatering discharge to be low. The discharge footprint is not expected to impact into more productive areas of Lake Way (basins where water eventually collects). Following large, episodic rainfall events, the salt concentrations in Lake Way are expected to be sufficiently diluted to enable normal hatching and breeding cycles to occur.

Kimba Resources has also committed to monitoring as per licence conditions at the monitoring locations which were the same as from the previous operation. The locations will be depicted on a map within the Licence.

Risk Assessment

Consequence: Moderate

Likelihood: Unlikely

Risk Rating: Moderate



Regulatory Controls

- A condition will be placed on the Licence depicting the approved discharge point and abatement which include measures to reduce sediment loading in the effluent, ensure erosions and scouring impacts are minimised and to sure the likelihood of damage to fringing vegetation is minimised. Kimba should ensure that sufficient settling is achieved in the dams prior to discharge to Lake Way.
- Condition 2.2.2 ensures that point source emissions to surface water are limited to 1,115,000 kL per annual period and a limit of 80 mg/L total suspended solids (TSS).
- Monitoring conditions 3.2.1 and 3.2.2 require quarterly monitoring of the dewatering discharge and six monthly monitoring of ambient sediment. Monitoring of these key water parameters is required to ensure any impacts to Lake Way can be assessed.
- Condition 3.2.3 will require an annual assessment of the impacts on Lake Way from the dewatering in the form of a dewatering discharge report. This is to be submitted in conjunction with the Annual Environmental Report.
- Improvement condition 4.1.1, IR1 requires the Licensee to submit a monitoring plan for an annual assessment of potential biological impacts from the dewater discharge. IR2 requires the Licensee to review the selection of monitoring sites in Tables 3.3.1 and 3.3.2 to ensure that monitoring is completed of both control (non-impacted) and impacted sites.

Residual Risk

Consequence: Moderate

Likelihood: Unlikely

Risk Rating: Moderate