

# Licence

# Environmental Protection Act 1986, Part V

**Licensee: Paddington Gold Pty Ltd** 

Licence: L8512/2010/2

Registered office: Level 36 Exchange Plaza

2 The Esplanade PERTH WA 6000

**ACN:** 008 585 886

Premises address: Bullant Gold Mine

Mining Tenements M16/44 and M16/45

ORA BANDA WA 6431 As depicted in Schedule 1.

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

Commencement date: Saturday, 18 July 2015

**Expiry date:** Friday, 17 July 2020

### 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
06	Mine dewatering: premises on which water is	50 000 tonnes or	1,200,000 tonnes per
	extracted and discharged to the environment	more per year	year
	to allow mining of ore.		

### **Conditions**

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

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

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## **Contents**

Licence	1
Contents	2
Introduction	2
Licence conditions	4
1 General	4
2 Emissions	6
3 Monitoring	8
4 Improvements	9
5 Information	10
Schedule 1: Maps	12
Schedule 2: Reporting & notification forms	14

## Introduction

This Introduction is not part of the Licence conditions.

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

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

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

### Licence requirements

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

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

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

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

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**

Paddington Gold Pty Ltd (Paddington), owned by Norton Gold Fields Limited took ownership of the Bullant Gold Mine in August 2013 from Argent Minerals Limited (Argent). The Bullant Mine is located within the Coolgardie mineral fields on mining tenements M16/44 and M16/45. The small town of Ora Banda is located approximately 16km to the north-west of the project, and 45km north-west of Kalgoorlie-Boulder.

Paddington commenced re-mining of Bullant underground mine in January 2014 and are currently dewatering from Bullant underground mine into Wattlebird pit (previously referred to as Old Zuleika pit). Dewatering activies were undertaken previously by the prior owners until the project ceased in December 2009 and the mine was allowed to flood with no dewatering taking place. A company takeover occurred in 2010 and an application to dewater the intial volume from the mine and continue dewatering was issed in July 2011. Paddington continues dewatering under the issued licence.

This Licence is the successor to licence L8512/2010/1.

The licences and works approvals issued for the Premises since 19/02/2002 are:

Instrument log		
Instrument	Issued	Description
W3556/2001/1	19/02/2002	Works Approval for dewatering
W4843/2010/1	27/01/2011	Works Approval for dewatering
L8512/2010/1	14/07/2011	Licence issued for dewatering
L8512/2010/1	13/10/2011	Licence transfer to Kalgoorlie Mining Company (Bullant) Pty
		Ltd
W5071/2011/1	22/12/2011	Works approval for category 89 putrescible landfill
L8512/2010/1	19/06/2013	Licence amendment for change of occupier, one year licence
		extension and change of freeboard limit
L8512/2010/1	04/09/2014	Licence amendment to format and adding mine dewatering
		discharge point
L8512/2010/2	DRAFT	Licence reissued

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

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

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

'CEO' means CEO of the Department of Environment Regulation;

'CEO' for the purpose of correspondence means;

Manager Licensing Resources (South)
Department of Environment Regulation
Locked Bag 33
Cloisters Square
PERTH WA 6850

Telephone: (08) 6467 5000 Facsimile: (08) 6467 5562

Email: industry.regulation@der.wa.gov.au;

'code of practice for the storage and handling of dangerous goods' means the document titled "Storage and handling of dangerous goods: Code of Practice" published by the Department of Mines and Petroleum, as amended from time to time;

'dangerous goods' has the meaning defined in the *Dangerous Goods Safety (Storage and Handling of Non-explosives) Regulations 2007*;

**'environmentally hazardous material'** means material (either solid or liquid raw materials, materials in the process of manufacture, manufactured products, products used in the manufacturing process, by-products and waste) which if discharged into the environment from or within the premises may cause pollution or environmental harm. Note: Environmentally hazardous materials include dangerous goods where they are stored in quantities below placard quantities. The storage of dangerous goods above placard quantities is regulated by the Department of Mines and Petroleum;

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

'fugitive emissions' means all emissions not arising from point sources;



- 'Licence' means this Licence numbered L8512/2010/1 and issued under the Act;
- 'Licensee' means the person or organisation named as Licensee on page 1 of the Licence;
- 'NATA' means the National Association of Testing Authorities, Australia;
- 'NATA accredited' means in relation to the analysis of a sample that the laboratory is NATA accredited for the specified analysis at the time of the analysis;
- **'Premises'** means the area defined in the Premises Map in Schedule 1 and listed as the Premises address on page 1 of the Licence;
- 'Schedule 1' means Schedule 1 of this Licence unless otherwise stated:
- 'Schedule 2' means Schedule 2 of this Licence unless otherwise stated;
- **'spot sample'** means a discrete sample representative at the time and place at which the sample is taken:
- **'Usual working day'** means 0800 1700 hours, Monday to Friday excluding public holidays in Western Australia; and
- 'µS/cm' means microsiemens per centimetre.
- 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 General conditions

- 1.2.1 Nothing in the Licence shall be taken to authorise any emission that is not mentioned in the Licence, where the emission amounts to:
  - (a) pollution;
  - (b) unreasonable emission;
  - (c) discharge of waste in circumstances likely to cause pollution; or
  - (d) being contrary to any written law.
- 1.2.2 The Licensee shall operate and maintain all pollution control and monitoring equipment to the manufacturer's specification or any relevant and effective internal management system.
- 1.2.3 The Licensee, except where storage is prescribed in section 1.3, shall ensure that environmentally hazardous materials are stored in accordance with the code of practice for the storage and handling of dangerous goods.
- 1.2.4 The Licensee shall immediately recover, or remove and dispose of spills of environmentally hazardous materials outside an engineered containment system.
- 1.2.5 The Licensee shall:
  - implement all practical measures to prevent stormwater run-off becoming contaminated by the activities on the Premises; and
  - (b) treat contaminated or potentially contaminated stormwater as necessary prior to being discharged from the Premises.<sup>1</sup>

Note1: The Environmental Protection (Unauthorised Discharges) Regulations 2004 make it an offence to discharge certain materials into the environment.



### 1.3 Premises operation

- 1.3.1 The Licensee shall ensure that all pipelines containing environmentally hazardous substances are either:
  - a) equipped with automatic cut-offs in the event of a pipe failure; or
  - b) provided with secondary containment sufficient to contain any spill for a period equal to the time between routine inspections.
- 1.3.2 The Licensee shall ensure that any saline dewatering effluent shall only be managed in the following manner:
  - (a) used for dust suppression in a manner that minimises damage to surrounding vegetation; or
  - (b) discharged to previously mined pits Wattlebird and San Peblo.
- 1.3.3 The Licensee shall:
  - a) undertake inspections as detailed in Table 1.3.1
  - b) where any inspection identifies that an appropriate level of environmental protection is not being maintained, take corrective action to mitigate adverse environmental consequences as soon as practicable; and
  - c) maintain a record of all inspections undertaken.

Table 1.3.1: Inspection of infrastructure				
Scope of inspection Type of inspection Frequency of inspection				
Dewater pipelines	Visual Integrity	Once every 12 hour period		

# 2 Emissions

#### 2.1 General

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

### 2.2 Point source emissions to air

There are no specified conditions relating to point source emissions to air in this section.

### 2.3 Point source emissions to surface water

There are no specified conditions relating to point source emissions to surface water in this section.

## 2.4 Point source emissions to groundwater

2.4.1 The Licensee shall ensure that where waste is emitted to groundwater from the emission points in Table 2.4.1 it is done so in accordance with the conditions of this Licence.

Table 2.4.1: Emission points to groundwater				
Emission point reference	Description	Source including abatement		
Wattlebird pit	Dewatering pipeline direct discharge into Wattlebird pit	Mine dewater from Bullant underground mine		
San Peblo pit	Dewatering pipeline direct discharge into San Peblo pit	Mine dewater from Bullant underground mine and from Wattlebird pit		



2.4.2 The Licensee shall not cause or allow point source emissions to groundwater that do not meet the limits listed in Table 2.4.2

Table 2.4.2: Point source emission limits to groundwater				
Emission point Parameter Limit Averaging period (including units)			Averaging period	
Wattlebird pit San Peblo pit	Freeboard	>4 metres below crest level	Spot Sample	

2.4.3 The Licensee shall target point source emissions to groundwater to meet the levels specified in Table 2.4.3

Table 2.4.3: Point source emission targets to groundwater				
Emission point reference   Parameter   Target (including units)   Averaging period				
Wattlebird pit Freeboard		>6 metres below crest level	Spot sample	
San Peblo pit				

### 2.5 Emissions to land

There are no specified conditions relating to point source emissions to land in this section.

### 2.6 Fugitive emissions

2.6.1 The Licensee shall use all reasonable and practical measures to prevent and where that is not practicable to minimise dust emissions from the Premises.

### 2.7 Odour

There are no specified conditions relating to odour in this section.

### 2.8 Noise

There are no specified conditions relating to noise in this section.



# 3 Monitoring

### 3.1 General monitoring

### 3.1.1 The licensee shall ensure that:

- (a) all water samples are collected and preserved in accordance with AS/NZS 5667 1:
- (b) all groundwater sampling is conducted in accordance with AS/NZS 5667.11; and
- (c) all laboratory samples are submitted to and tested by a laboratory with current NATA accreditation for the parameters being measured unless indicated otherwise in the relevant table.

### 3.1.2 The Licensee shall ensure that :

- (a) monthly monitoring is undertaken at least 15 days apart; and
- (b) annual monitoring is undertaken at least 9 months apart.

### 3.2 Monitoring of point source emissions to air

There are no specified conditions relating to monitoring of point source emissions to air in this section.

### 3.3 Monitoring of point source emissions to surface water

There are no specified conditions relating to monitoring of point source emissions to surface water in this section.

### 3.4 Monitoring of point source emissions to groundwater

3.4.1 The Licensee shall undertake the monitoring in Table 3.4.1 according to the specifications in that table.

Table 3.4.1: Monitoring of point source emissions to groundwater				
Emission point reference	Parameter	Units	Averaging Period	Frequency
Wattlebird pit and San Peblo	Volume of dewatering water	kL	Continuous	Monthly
pit	Freeboard	metres below crest level	Spot sample	Monthly
	pH <sup>1</sup>	-		
	Electrical conductivity <sup>1</sup>	μS/cm	Spot sample	Annually
	Total dissolved solids (TDS)	mg/L g/day		

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

### 3.5 Monitoring of emissions to land

There are no specified conditions relating to monitoring of emissions to land in this section.

### 3.6 Monitoring of inputs and outputs

There are no specified conditions relating to monitoring of inputs and outputs in this section.

## 3.7 Process monitoring

There are no specified conditions relating to process monitoring in this section.

 Environmental Protection Act 1986
 Page 8 of 19

 Licence: L8512/2010/2
 IRLB\_TI0672 v2.8

 File Number: 2010/008369
 IRLB\_TI0672 v2.8



## 3.8 Ambient environmental quality monitoring

There are no specified conditions relating to ambient environmental quality monitoring in this section.

### 3.9 Meteorological monitoring

There are no specified conditions relating to meteorological monitoring in this section.

# 4 Improvements

There are no specified improvement conditions in this section.



# 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 Licensee shall ensure that:
  - (a) any person left in charge of the Premises is aware of the conditions of the Licence and has access at all times to the Licence or copies thereof; and
  - (b) any person who performs tasks on the Premises is informed of all of the conditions of the Licence that relate to the tasks which that person is performing.
- 5.1.3 The Licensee shall complete an Annual Audit Compliance Report indicating the extent to which the Licensee has complied with the conditions of the Licence, and any previous licence issued under Part V of the Act for the Premises for the previous annual period.
- 5.1.4 The Licensee shall implement a complaints management system that as a minimum records the number and details of complaints received concerning the environmental impact of the activities undertaken at the Premises and any action taken in response to the complaint.

### 5.2 Reporting

5.2.1 The Licensee 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	Table 5.2.1: Annual Environmental Report					
Condition or table	Parameter	Format or form <sup>1</sup>				
(if relevant)						
-	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				
2.6.1	Measures taken to suppress dust	None specified				
Table 3.4.1	Monitoring of point source emissions to groundwater	GR1				
5.1.3	Compliance	Annual Audit Compliance Report (AACR)				
5.1.4	Complaints summary	None specified				
-	Total monthly volumes of dewatering water discharged into the Wattlebird pit and San Peblo pit	None specified				

Note 1: Forms are in Schedule 2



- 5.2.2 The Licensee shall ensure that the Annual Environmental Report also contains:
  - (a) any relevant process, production or operational data recorded under condition 3.1.3; and
  - (b) an assessment of the information contained within the report against previous monitoring results and Licence limits and/or targets

### 5.3 Notification

5.3.1 The Licensee 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.

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	N1
-	Any failure or malfunction of any pollution control	day.	
	equipment or any incident, which has caused, is causing or may cause pollution	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**

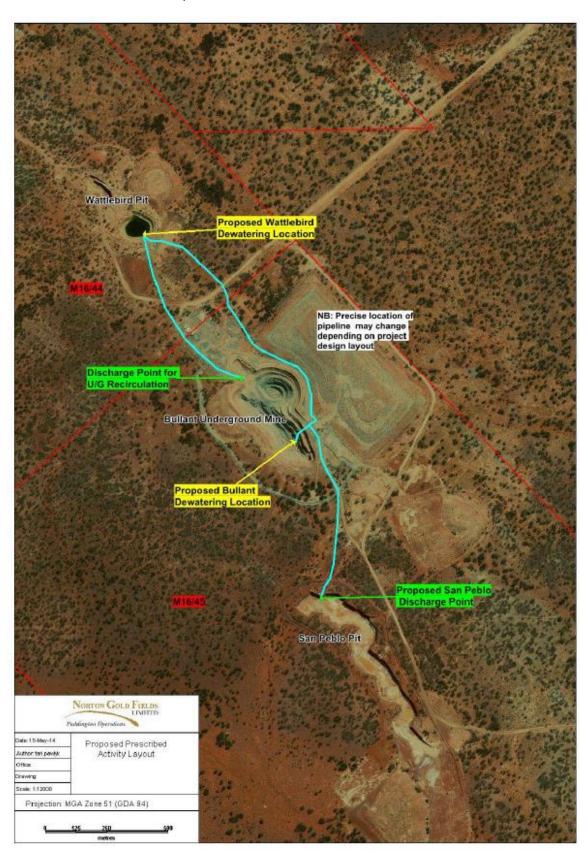
The Premises is shown in the map below. The yellow line depicts the Premises boundary.





## Map of emission points

The locations of the emission points defined in Table 2.5.1 are shown below.





# Schedule 2: Reporting & notification forms

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

# ANNUAL AUDIT COMPLIANCE REPORT PROFORMA

# **SECTION A**

Licence Number:		Licence File Number:
Licence Number.		Licence i lie Number.
Company Name:		ABN:
Trading as:		
Reporting period:		
	to	
	NCE WITH LICENCE CONDITION  E Licence complied with within the	ONS ne reporting period? (please tick the appropriat
,		Yes ☐ Please proceed to Secti
		No ☐ Please proceed to Secti
		·
Fach nage must be initialled	by the person(s) who signs Sect	tion C of this Annual Audit Compliance Report
(AACR).		
(AACR).		
(AACR).		

Environmental Protection Act 1986 Licence: L8512/2010/2 File Number: 2010/008369 C

В



# **SECTION B**

# DETAILS OF NON-COMPLIANCE WITH LICENCE CONDITION.

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



# **SECTION C**

### SIGNATURE AND CERTIFICATION

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

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

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

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

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

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



Licensee: Paddington Gold Pty Ltd

Form: GR1 Period:

Name: Monitoring of point source emissions to groundwater

	Form GR1: Monitorin	g of point	source emissions t	o groundwate	er	
Emission point	Parameter	Limit	Result <sup>1</sup>	Averaging period	Method	Sample date & times
Wattlebird pit	Volume of dewatering water	-	kL			
	Freeboard	4m below crest level	metres below crest level			
	рН	-				
	Electrical conductivity	-	μS/cm			
	TDS	-	mg/L			
San Peblo pit	Volume of dewatering water	-	kL			
	Freeboard	4m below crest level	metres below crest level			
	рН	-				
	Electrical conductivity	-	μS/cm			
	TDS	-	mg/L			

Note 1: All units are referenced to STP dry

Licence: L8512/2010/2 Licensee: Paddington Gold Pty Ltd

Form: N1 Date of breach:

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

These pages outline the information that the operator must provide.

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

Notification requirements for any failure or malfunction of any pollution control equipment or any incident which has caused, is causing or may cause pollution				
Date and time of event				
Reference or description of the				
location of the event				
Description of where any release				
into the environment took place				
Substances potentially released				
Best estimate of the quantity or				
rate of release of substances				
Measures taken , or intended to				
be taken, to stop any emission				
Description of the failure or				
accident				

# 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	
Paddington Gold Pty Ltd	
Date	



# **Decision Document**

# Environmental Protection Act 1986, Part V

**Proponent: Paddington Gold Pty Ltd** 

Licence: L8512/2010/2

Registered office: Level 36 Exchange Plaza

2 The Esplanade PERTH WA 6000

ACN: 008 585 886

Premises address: Bullant Gold Mine

Mining Tenements M16/44 and M16/45

ORA BANDA WA 6431 As depicted in Schedule 1.

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

Commencement date: Saturday, 18 July 2015

**Expiry date:** Friday, 17 July 2020

#### **Decision**

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

Decision Document prepared by: Fiona Sharpe

Licensing Officer

Decision Document authorised by:

Danielle Eyre

Manager Licensing Resources (South)

Environmental Protection Act 1986 Decision Document: L8512/2010/2 File Number: 2010/008369



# **Contents**

Decision Document	1
Contents	2
1 Purpose of this Document	2
2 Administrative summary	3
3 Executive summary of proposal	4
4 Decision table	5
5 Advertisement and consultation table	10
6. Emissions and discharges risk assessment framework	11
Appendix A	12

# 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.

Environmental Protection Act 1986 Decision Document: L8512/2010/2 File Number: 2010/008369



# 2 Administrative summary

Administrative details				
Application type	Works Approval  New Licence  Licence amendment  Works Approval amendment			
Activities that cause the premises to become	Category number(s)			Assessed design capacity
prescribed premises	06			1,200,000kL per year
Application verified	Date: 22 A	pril 2015		
Application fee paid	Date: 01 M	lay 2015		
Works Approval has been complied with	Yes□	No	N/A	$\boxtimes$
Compliance Certificate received	Yes□	No	N/A	
Commercial-in-confidence claim	Yes□	No⊠		
Commercial-in-confidence claim outcome				
Is the proposal a Major Resource Project?	Yes⊠	No		
Was the proposal referred to the Environmental Protection Authority (EPA) under Part IV of the Environmental Protection Act 1986?	Yes□	No⊠	Mana	ral decision No: ged under Part V   ssed under Part IV
Is the proposal subject to Ministerial Conditions?	Yes□	No⊠	Ministerial statement No:  EPA Report No:	
Does the proposal involve a discharge of waste into a designated area (as defined in section 57 of the <i>Environmental Protection Act 1986</i> )?	Yes⊠ Departmer	No⊡ nt of Wate	r cons	ulted Yes ⊠ No □
Is the Premises within an Environmental Protection Policy (EPP) Area Yes  No⊠  If Yes include details of which EPP(s) here.				
Is the Premises subject to any EPP requirements? Yes $\square$ No $\boxtimes$ If Yes, include details here, eg Site is subject to SO <sub>2</sub> requirements of Kwinana EPP.				



# 3 Executive summary of proposal and assessment

The Bullant Gold Mine was acquired by Paddington Gold Pty Ltd (Paddington) in 2013 as part of Norton Gold Fields Limited. Bullant Mine tenement was acquired from Kalgoorlie Mining Company (Bullant) Pty Ltd. Previously, Bullant was 100% owned by Argent after the purchase of the project in October 2009 from Kundana Gold Pty Ltd and the company assumed full control over the two tenements associated with the mine and all associate infrastructure.

The Bullant mine was purchased by Argent from Kundana Gold Pty Ltd who ceased mining in December 2009. Under the previous owners the mine had been continuously dewatered (below category 6 thresholds) into nearby Wattlebird Pit (previously Old Zuleika pit), however the Bullant underground project was allowed to flood after the December 2009 halt in operations. An estimated 70,000-100,000kL was initially required to be pumped from the Bullant Mine into Wattlebird Pit in order for the operations to recommence.

The Bullant Mine is located within the Coolgardie mineral fields on M16/44 and M16/45 as depicted in Schedule 1 and is located approximately 16km from the small town of Ora Banda to the northwest of the project. Its nearest industrial neighbour is the Cawse Nickel Operations, which is located approximately 18km to the north of the project.

There are no surface water bodies within the project area with the nearest significant surface water being White Flag Lake located approximately 20km to the south east of the project. The groundwater in the area is hypersaline and there are no nearby groundwater users.

The site also has infrastructure including a workshop, washdown facility, chemical and hydrocarbon storage area and a refuelling area. All waste from the project will be removed by an appropriately licensed carrier to an appropriate disposal facility. Following the dewatering phase of the project, ore from the operations will be toll treated by a nearby processing plant.

The current dewatering pipeline from Wattlebird pit to Bullant underground mine and San Peblo pit is pre-existing from when the mine was operational prior to Paddington acquiring the project in 2013. The dewatering pipeline from Wattlebird pit to Bullant underground mine has been in operation since 2010 and intermittently pumped water from the underground mine.

Paddington has almost completed the cutback operation on Wattlebird pit. During the cutback dewater was preferentially pumped to San Peblo pit and then pumped back to Bullant underground. As operations at Wattlebird wind down, Wattlebird pit will be re-used as a discharge point and San Peblo will remain as a discharge point for contingency measures.

This decision document is the result of a Licence re-issue. No changes have occurred to the dewatering operations, therefore most of the risk assessment has remained unchanged.

Environmental Protection Act 1986 Decision Document: L8512/2010/2 File Number: 2010/008369



# 4 Decision table

All applications are assessed in line with the *Environmental Protection Act 1986*, the *Environmental Protection Regulations 1987*, DEC's Policy Statement - Limits and targets for prescribed premises (2006), and DER's Operational Procedure on Assessing Emissions and Discharges from Prescribed Premises. Where other references have been used in making the decision they are detailed in the decision document.

DECISION TAB	LE			
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	L1.2.5	OSC	DER's assessment and decision making are detailed in Appendix A.	Application supporting documentation  General Provisions of the Environmental Protection Act 1986
Presises operation	L1.3.1-1.3.3	OSC	DER's assessment and decision making are detailed in Appendix A.	Application supporting documentation  General Provisions of the Environmental Protection Act 1986
Emissions general	L2.1.1	OSC	Descriptive limits will be set through condition 2.6.2 of the licence and a freeboard limit and target is included in conditions 2.4.2 and 2.4.3 therefore OSC regarding recording and investigation of exceedances of limits or targets has been included.	N/A
Point source emissions to air including monitoring	L2.2 and L3.2	N/A	Normal Operation  No significant point source air emissions are expected from the Premises.  No specified conditions relating to point source air emissions are required in the Licence.	Environmental Protection (Unauthorised Discharges) Regulations, 2004.
Point source emissions to surface water	L2.3 and L3.3	N/A	Normal Operation  No significant point source emissions to surface water are expected as a result of the dewatering activities. There are no surface water bodies in the	Application supporting documentation



DECISION TABI	LE			
Works Approval / Licence section	Condition number W = Works Approval L= Licence	OSC or NSC	Justification (including risk description & decision methodology where relevant)	Reference documents
including monitoring			nearby vicinity of the site. No specified conditions relating to point source emissions to water or the monitoring of such emissions are required to be added to the Licence.	General Provisions of the Environmental Protection Act 1986
Point source emissions to groundwater including monitoring	L2.4.1-2.4.3 and L3.4.1	OSC	Normal Operation Emission Description Emission: Dewatering effluent from underground mining operations is discharged into Wattlebird and San Peblo Pits.  Impact: Potential impacts include disturbing groundwater dependent ecosystems and potential negative impacts on groundwater users. There are no nearby sensitive receptors in regards to groundwater users and groundwater dependent ecosystems Controls: No controls have been placed or proposed by the Licensee.  Risk Assessment Consequence: Minor. Likelihood: Likely Risk Rating: Moderate  Regulatory Controls OSC's 2.4.2, 2.4.3 and 3.4.1 have been included in the Licence to limit the amount of mine dewater discharged into the pits and to monitor the quality of water in the pit entering the groundwater.  Residual Risk Consequence: Minor Likelihood: Likely Risk Rating: Moderate	Application supporting documentation  General Provisions of the Environmental Protection Act 1986
Emissions to land including monitoring	L2.5 and L3.5	N/A	Normal Operation  There will be no significant emissions to land as a result of the operation of the dewatering pipelines. No specified conditions relating to emissions or	General Provisions of the Environmental Protection Act 1986



DECISION TAE	BLE			
Works Approval / Licence section	Condition number W = Works Approval L= Licence	OSC or NSC	Justification (including risk description & decision methodology where relevant)	Reference documents
			the monitoring of emissions are required to be added to the Licence.	
Fugitive emissions	L2.6.1 and L2.6.2	OSC	Normal Operation Emission Description Emission: Dust is generated from the movement of vehicles, materials handling and open areas. Impact: Dust emissions can be harmful to human health and the environment. Elevated total suspended particulates (TSP) can impact ambient environmental quality resulting in amenity impacts and can smother vegetation. Particulate matter that are less than 10 (PM <sub>10</sub> ) or 2.5 (PM <sub>2.5</sub> ) micrometres in diameter can be drawn deep into the lungs causing human health impacts. The chemical and physical properties of the particles, the size of the particles and the duration of exposure are all factors which may affect human health. Controls: Use of appropriate dust suppression techniques on the track and daily observations on dust within the work area. Additional measures will be implemented if required.  Risk Assessment Consequence: Moderate Likelihood: Possible Risk Rating: Moderate  Regulatory Controls OSC 2.6.1 is included in the Licence to ensure adequate management of fugitive dust emissions on site.  Residual Risk Consequence: Minor Likelihood: Possible Risk Rating: Moderate	General Provisions of the Environmental Protection Act 1986



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
Odour	L2.7	N/A	Normal Operation There will be no significant odour emissions as a result of the dewatering operations. No specified conditions relating to odour are required for the Licence.	General provisions of the <i>Environmental</i> <i>Protection Act</i> 1986
Noise	L2.8	N/A	Normal Operation  There will be no significant noise emissions as a result of the dewatering operations. No specified conditions relating to odour are required for the Licence.	General Provisions of the Environmental Protection Act 1986
Monitoring general	L3.1.1 and L3.1.2	OSC	OSC's 3.1.1 and 3.1.2 are included in the Licence to ensure that water monitoring is carried out in accordance with appropriate standards and with an appropriate period of time between samplings.	General Provisions of the Environmental Protection Act 1986
Monitoring of inputs and outputs	L3.6	N/A	No specified conditions relating to inputs and outputs are required for the Licence.	General Provisions of the Environmental Protection Act 1986
Process monitoring	L3.7.1	OSC	No specified conditions relating to process monitoring are required for the Licence.	General Provisions of the Environmental Protection Act 1986
Ambient quality monitoring	L3.8	N/A	No specified conditions relating to ambient quality monitoring are required for the Licence.	General Provisions of the Environmental Protection Act 1986
Meteorological monitoring	L3.9	N/A	No specified meteorological monitoring is required for the Licence.	General Provisions of the Environmental Protection Act 1986
Improvements	L4	N/A	No specified improvement conditions are required for the Licence.	N/A
Information	L5.1-5.3	OSC	Standard 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.  The due date for the annual environmental report has been amended to	N/A
			state it shall be submitted within 90 calendar days after the end of the	



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	
			annual period. It was previously incorrectly stated as 60 days.		



# 5 Advertisement and consultation table

Date	Event	Comments received/Notes	How comments were taken into consideration
11/05/2015	Application advertised in West Australian (or other relevant newspaper)	No comments received	N/A
29/06/2015	Proponent sent a copy of draft instrument	No comments received	N/A



# 6. Risk Assessment

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

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

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



# Appendix A

### **General conditions**

#### Emission Risk Assessment

### **Normal Operation**

**Emission Description** 

*Emission:* Stormwater contaminated with environmentally hazardous materials.

*Impacts:* Potential contamination of surrounding land and surface water drainage systems. *Controls:* The Licensee has not specified controls in regards to stormwater management.

Risk Assessment

Consequence: Moderate Likelihood: Unlikely Risk Rating: Moderate

### Regulatory Controls

OSC 1.2.5 has been included in the Licence to ensure that uncontaminated stormwater is kept separate from contaminated or potentially contaminated stormwater and that if stormwater has come into contact with a possible source of contamination; it is then treated as contaminated.

Residual Risk

Consequence: Minor Likelihood: Unlikely Risk Rating: Moderate

### **Normal Operation**

### **Emission Description**

*Emission*: Hypersaline water is used for dust suppression.

Impact: Potential contamination of surrounding soils and vegetation death.

Controls: Water cart operators are trained on the Licensee's Dust Suppression Procedure to minimise

the impact on the vegetation.

#### Risk Assessment

Consequence: Minor Likelihood: Possible Risk Rating: Moderate

#### Regulatory Controls

OSC 1.3.2 has been included to ensure that dewatering effluent used for dust suppression is used in a manner that minimises damage to surrounding vegetation.

Residual Risk

Consequence: Minor Likelihood: Possible Risk Rating: Moderate

### **Emergency Situations**

### **Emission Description**

*Emission:* Hypersaline water is transported in pipelines through areas of native vegetation. Emission would occur if pipelines rupture and/or leak.

Impacts: Potential contamination of surrounding soils and vegetation death.

Environmental Protection Act 1986 Decision Document: L8512/2010/2 File Number: 2010/008369



Controls: The pipelines are within bunded pipeline corridors and these bunded corridors are in highly disturbed areas which are regularly traversed by mining traffic. The proponent undertakes 12 hourly visual inspections of the pipelines.

#### Risk Assessment

Consequence: Insignificant Likelihood: Possible Risk Rating: Low

### Regulatory Controls

OSC 1.3.1 requires the Licensee to ensure that all pipelines are either equipped with automatic cutoffs or sufficiently contained within a secondary containment in the event of a pipe failure.

#### Residual Risk

Consequence: Insignificant

Likelihood: Unlikely Risk Rating: Low

### **Emergency Situations**

### **Emission Description**

*Emission:* Hypersaline water discharged into the previously mined pits. Emission would occur if the water in the pits overtops.

Impacts: Potential contamination of surrounding soils and vegetation death.

Controls: The proponent has proposed to maintain a minimum freeboard and to monitor and survey water volume and levels in the pits monthly.

#### Risk Assessment

Consequence: Minor Likelihood: Unlikely Risk Rating: Moderate

### Regulatory Controls

OSC's 2.4.2 and 2.4.3 have been included in the Licence to ensure a minimum freeboard is maintained in the pit.

#### Residual Risk

Consequence: Minor Likelihood: Rare Risk Rating: Low

Environmental Protection Act 1986 Decision Document: L8512/2010/2 File Number: 2010/008369