

# Licence

# Environmental Protection Act 1986, Part V

**Licensee: Goldview Metals Limited** 

Licence: L8617/2011/2

Registered office: 8 May Avenue

SUBIACO WA 6008

**ACN:** 079 580 055

Premises address: New Orient Gold Mine

Mining Tenement: M21/66 and M21/140

**CUE WA 6640** 

As depicted in Schedule 1

**Issue date:** Thursday, 12 February 2015

Commencement date: Friday, 20 February 2015

**Expiry date:** Wednesday, 19 February 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
6	Mine dewatering: premises on which water is extracted and discharged into	50,000 tonnes or more per year	163,000 tonnes per annual period
	the environment to allow mining of ore.	Thore per year	arifidal period

#### **Conditions**

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

Date signed: 26 November 2015

Alana Kidd

Manager Licensing – (Resource Industries)

Officer delegated under section 20 of the Environmental Protection Act 1986

Environmental Protection Act 1986 Licence: L8617/2011/2 File Number: 2011/010800 Page 1 of 15 Amendment date: Thursday 26 November 2015



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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 the Act. Conditions contained with 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: 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.

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#### 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 the Premises has been assessed under Part IV of the Act, it 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**

Goldview Metals Limited was issued *Environmental Protection Act 1986* licence L8617/2011/1 in February 2011 for the New Orient Gold Mine (New Orient). New Orient has been assessed as 'prescribed premises' category number 06, under Schedule 1 of the *Environmental Protection Regulations 1987*.

New Orient is located on an island in Lake Austin in the Murchison Goldfields, approximately 20 kilometres south of Cue and 540 km north east of Perth. The nearest residential premises is located in the town of Cue. Lake Austin is a large inland saline closed basin and covers approximately 770 square kilometres. The lake has a temporary water regime and fills infrequently, generally in response to large rainfall events, and is mainly dry for extended periods of time. Mining tenement M21/66 and M21/140 are part of the Lake Austin system. Groundwater samples from water within the existing mine pit indicate groundwater to have an electrical conductivity (EC) of about 240 000  $\mu$ S/cm.

Dewatering operations at New Orient consist of groundwater being extracted from an existing mine shaft to lower the local groundwater level. This will allow for the excavation of a future open mine pit and subsequent mining operations to occur. The extracted water will be pumped into an 80,000 litre holding tank, or settling pond, from which future process water will be drawn. Excess water from this tank or pond (overflow) will then be discharged to Lake Austin.

New Orient only operates during daylight hours with a maximum of 6 staff on site at any one time. No accommodation is provided at New Orient with all staff commuting from the town of Cue.

This Licence is the result of an amendment sought by the Licensee to add the tenement M21/140 and to add an additional mine dewatering discharge point for the purpose of exploration and development of mineral resources on M21/140. The dewatering effluent quality will be of similar quality to the existing approved discharge point as the geology is consistent across both areas. Dewatering effluent will be stored in a settling pond prior to discharge to Lake Austin to allow settling of solids and the discharge point will have erosion control measures applied. Monitoring requirements have been updated at this amendment.

The licences and works approvals issued for the Premises since 18/12/2008 are:

Instrument log		
Instrument	Issued	Description
L8266/2008/1	18/12/2008	New application for a licence – Category 6
L8266/2008/1	31/10/2011	Licence revoked
L8617/2011/1	20/02/2012	New application for a licence – Category 6
L8617/2011/2	12/02/2015	New licence and conversion to REFIRE
L8617/2011/2	26/11/2015	Licence amendment to add tenement M21/140 and an addition
		discharge point to Lake Austin.

#### Severance

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

#### **END OF INTRODUCTION**

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# Licence conditions

### 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 each year;

'**APHA'** means the American Public Health Association: *Standard Methods for the Examination of Water and Wastewater*, 22<sup>nd</sup> Edition;

'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 5667.10' means the Australian Standard AS/NZS 5667.10 Water Quality – Sampling – Guidance on sampling of waste waters;

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

'CEO' for the purpose of correspondence means;

Chief Executive Officer
Department Administering the Environmental Protection Act 1986
Locked Bag 33
CLOISTERS SQUARE WA 6850
Email: info@der.wa.gov.au

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

'Licence' means this Licence numbered L8617/2011/2 and issued under the Act;

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

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

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

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

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

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

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

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

- 1.1.3 Any reference to an Australian or other standard in the Licence means the relevant parts of 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.
- 1.1.5 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 Premises operation

- 1.2.1 The Licensee shall ensure that any 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 via discharge pipeline in accordance with condition 2.2.1, or
  - (c) Used for process water and administration requirements.
- 1.2.2 The Licensee shall:
  - (a) undertake inspections as detailed in Table 1.2.1;
  - (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 1.2.1: Inspection of infrastructure			
Scope of inspection	Type of inspection	Frequency of inspection	
Mine dewater pipeline	Visual integrity	Daily during dewatering operations	
Erosion protection at Lake Austin discharge points	Visual integrity	Quarterly during discharge	

- 1.2.3 The Licensee shall ensure that all pipelines containing environmentally hazardous substances are either:
  - equipped with telemetry systems and pressure sensors along pipelines to allow the detection of leaks and failures;
  - (b) equipped with automatic cut-outs in the event of a pipe failure; or
  - (c) provided with secondary containment sufficient to contain any spill for a period equal to the time between inspections.
- 1.2.4 The Licensee shall ensure the limit specified in Table 1.2.2 is not exceeded.

Table 1.2.2 Production or design capacity limits		
Category <sup>1</sup>	Category description <sup>1</sup>	Premises production or design capacity limit
6	Mine dewatering	163 000 tonnes per annual period

Note 1: Environmental Protection Regulations 1987, Schedule 1.

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### 2 Emissions

#### 2.1 General

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

#### 2.2 Point source emissions to surface water

2.2.1 The Licensee shall ensure that where waste is emitted to surface water 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 surface water		
Emission point reference and location on Map of emission points	Description	Source including abatement
SW1	Dewatering discharge pipe outlet to Lake Austin on tenement M21/66	Dewatering effluent
SW2	Dewatering discharge pipe outlet to Lake Austin on tenement M21/140	Discharged point underlain by matting or rock armouring to avoid scouring of lake bed.

# 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 wastewater sampling is conducted in accordance with AS/NZS 5667.10; and
  - (c) all samples are submitted to and tested by a laboratory with current NATA accreditation for the parameters being measured unless indicated otherwise in relevant table.
- 3.1.2 The Licensee shall ensure that:
  - (a) quarterly monitoring is undertaken at least 45 days apart; and
  - (b) annual monitoring is undertaken at least 9 months apart.

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

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

Table 3.2.1: Monitoring of point source emissions to surface water			
Emission point reference	Parameter	Units	Frequency
SW1 and SW2	Volumetric flow rate	m <sup>3</sup> /month	Continuous during discharge
	pH <sup>1</sup>	-	Quarterly during
	Total dissolved solids (TDS), total suspended solids (TSS)	mg/L	discharge
	Total aluminium, Arsenic, Cadmium, Chromium, Copper, Total iron, Lead, Manganese, Nickel, Selenium, Zinc		Annual during discharge

Note 1: In-situ, non-NATA accredited analysis permitted.

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### 4 Information

#### 4.1 Records

- 4.1.1 All information and records required by the Licence shall:
  - (a) be legible;
  - (b) if amended, be amended in such a way that the original and subsequent amendments remain legible or are capable of retrieval;
  - (c) except for records listed in 4.1.1(d) be retained for at least 6 years from the date the records were made or until the expiry of the Licence or any subsequent licence; and
  - (d) for those following records, be retained until the expiry of the Licence and any subsequent licence:
    - (i) off-site environmental effects; or
    - (ii) matters which affect the condition of the land or waters.
- 4.1.2 The Licensee shall 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.
- 4.1.3 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.
- 4.1.4 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.

#### 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 4.2.1 in the format or form specified in that table.

Table 4.2.1: Annu	al Environmental Report	
Condition or table (if relevant)	Parameter	Format or form <sup>1</sup>
None specified	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	Specified monitoring of point source emissions to surface water	WR1
None specified	A discussion of the monitoring data and other collected data against historical data (trend analysis) and known standards	None specified
4.1.3	Compliance	Annual Audit Compliance Report (AACR)
4.1.4	Complaints summary	None specified

Note 1: Forms are in Schedule 2

#### 4.3 Notification

4.3.1 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.

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

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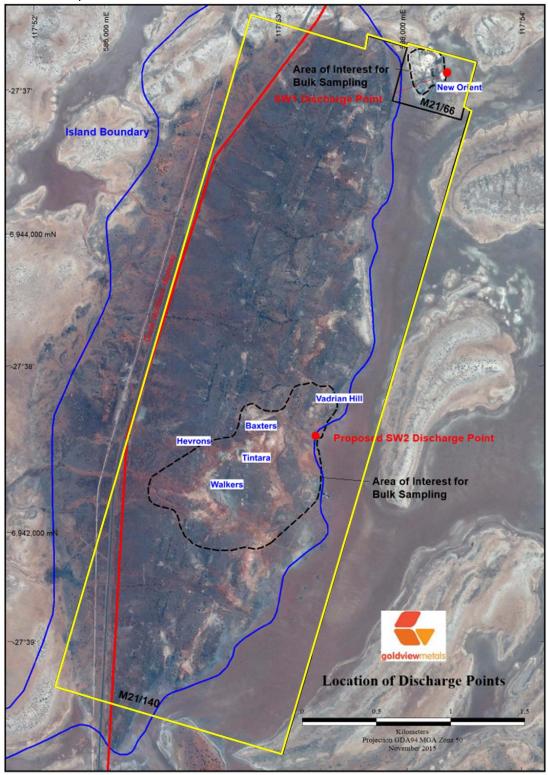
Note 1: Notification requirements in the licence shall not negate the requirement to comply with s72 of the Act Note 2: Forms are in Schedule 2



# Schedule 1: Maps

### Premises map, emission points map

The Premises is shown in the map below. The yellow line depicts the Premises boundary. The locations of the emission points defined in Table 2.2.1 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:
Company Name:		ABN:
Trading as:		
Reporting period:		
	to	
STATEMENT OF COMPLIANCE W  1. Were all conditions of the Licendox)		reporting period? (please tick the appropriate
		Yes ☐ Please proceed to Section
		No ☐ Please proceed to Section
Each page must be initialled by the AACR).	person(s) who signs Section	n C of this Annual Audit Compliance Report
nitial:		

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# **SECTION B**

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

Please use a separate page for each Licence condition that w	as not complied with.
a) Licence condition not complied with:	
b) Date(s) when the non compliance occurred, if applicable:	
c) Was this non compliance reported to DER?:	
Yes Reported to DER verbally  Date  Reported to DER in writing	□ No
Date	
d) Has DER taken, or finalised any action in relation to the non con	mpliance?:
e) Summary of particulars of the non compliance, and what was th	e environmental impact:
f) If relevant, the precise location where the non compliance occurr	red (attach map or diagram):
g) Cause of non compliance:	
h) Action taken, or that will be taken to mitigate any adverse effects	s of the non compliance:
i) Action taken or that will be taken to prevent recurrence of the nor	n compliance:
Each page must be initialled by the person(s) who signs Section C of	of this AACR
Initial:	

Environmental Protection Act 1986 Licence: L8617/2011/2 File Number: 2011/010800



# **SECTION C**

#### SIGNATURE AND CERTIFICATION

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

Environmental Protection Act 1986 Licence: L8617/2011/2 File Number: 2011/010800



Licence: L8617/2011/2 Licensee: Goldview Metals Limited

Form: WR1 Period : Name: Monitoring of point source emissions to surface water

Emission point	Parameter	Target	Result <sup>1</sup>	Sample date & times
Dewatering discharge as described in	Volumetric flow rate	Not specified	m <sup>3</sup> /month	
condition 2.2.1	рН	Not specified	-	
	Total Dissolved Solids	Not specified	mg/L	
	Total Suspended Solids	Not specified	mg/L	

Signed on behalf of Goldvic	ew Metals Limited:	Date:

Environmental Protection Act 1986 Licence: L8617/2011/2 File Number: 2011/010800

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Licence: L8617/2011/2 Licensee: Goldview Metals Limited

Form: N1 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		

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# 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	
Name	
Post	
Signature on behalf of	
Goldview Metals Limited	
Date	

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# **Decision Document**

# Environmental Protection Act 1986, Part V

**Proponent: Goldview Metals Limited** 

Licence: L8617/2011/2

Registered office: 8 May Avenue

SUBIACO WA 6008

**ACN:** 079 580 055

Premises address: New Orient Gold Mine

Mining Tenement M21/66 and M21/66

**CUE WA 6640** 

**Issue date:** Thursday, 12 February 2015

Commencement date: Friday, 20 February 2015

**Expiry date:** Wednesday, 19 February 2020

**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.

Decision Document prepared by: Cathy Scheib

Licensing Officer

Decision Document authorised by:

Alana Kidd

Manager Licensing – (Resource Industries)

Environmental Protection Act 1986 Decision Document: L8617/2011/2 File Number: 2011/010800



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# 1 Purpose of this Document

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

# 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	6 163,000 tonnes per annual period
Application verified	Date: N/A
Application fee paid	Date: N/A
Works Approval has been complied with	Yes□ No□ N/A⊠
Compliance Certificate received	Yes□ No□ N/A⊠
Commercial-in-confidence claim	Yes□ No⊠
Commercial-in-confidence claim outcome	
Is the proposal a Major Resource Project?	Yes□ No⊠
Was the proposal referred to the Environmental Protection Authority (EPA) under Part IV of the Environmental Protection Act 1986?	Yes□ No⊠ Referral decision No:  Managed under Part V □  Assessed under Part IV □
Is the proposal subject to Ministerial Conditions?	Yes☐ No⊠ Ministerial statement No:  EPA Report No:



Does the proposal involve a discharge of waste into a designated area (as defined in section 57 of the <i>Environmental Protection Act 1986</i> )?	Yes☐ No☒  Department of Water consulted Yes ☐ No ☐
Is the Premises within an Environmental Protection If Yes include details of which EPP(s) here.	Policy (EPP) Area Yes□ No⊠
Is the Premises subject to any EPP requirements? If Yes, include details here, e.g. Site is subject to S	

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# 3 Executive summary of proposal and assessment

Mr Victor Michael Caruso was issued *Environmental Protection Act 1986* licence L8617/2011/1 in February 2011 for the New Orient Gold Mine (New Orient). The registered owner of New Orient has now been changed to Goldview Metals Limited (Goldview). Mr Caruso owns Goldview. New Orient has been assessed as 'prescribed premises' category number 6, under Schedule 1 of the *Environmental Protection Regulations 1987*.

Mining has taken place on M21/66 and M21/140 for over 100 years with a mixture of alluvial, open pit and underground operations over that time. New Orient is located on mining tenements M21/66 and M21/140 in the Murchison Goldfields, approximately 20 kilometres (km) south of Cue and 540 km north east of Perth. The nearest residence is located in the town of Cue.

No mining or dewatering has occurred at New Orient since the issuing of the licence in 2011. Goldview proposes to locate a mobile Carbon in Pulp (CIP) processing facility at New Orient for the processing of the mined ore. Ore processing at New Orient is expected to be less than 30,000 tonnes per year. Goldview will be required to submit an application to DER for the CIP facility and the associated infrastructure. This application will also include details on the refurbishment of the tailings storage facility. The next phase of development currently planned is to take bulk samples from the prospective areas on M21/66 and M21/140 to confirm that the resources can be economically mined and processed. It is likely that some dewatering of surficial aquifers will be required on M21/140 to enable bulk sampling to take place on this tenement. As the geology of this area is consistent across the area of interest there is no difference in water quality from that discharged from the currently licenced operations on M21/66 expected.

Lake Austin is a large inland saline closed basin and covers approximately 770 square kilometres. The lake has a temporary water regime and fills infrequently, generally in response to large rainfall events, and is mainly dry for extended periods of time. Both Mining Tenements are part of the Lake Austin system with the centre land mass of the lease being 7.5 metres above the highest groundwater surface. Groundwater samples from water within the existing mine pit indicate an electrical conductivity (EC) of about 240 000  $\mu$ S/cm. Groundwater samples from the proposed dewatering area on M21/140 are expected to be similar.

Dewatering operations at New Orient consist of groundwater being extracted from an existing mine shaft to lower the local groundwater level. This will allow for the excavation of a future open mine pit and subsequent mining operations to occur. The extracted water will be pumped into an 80,000 litre holding tank or settling pond, from which future process water will be drawn. Excess water from this tank or pond (overflow) will then be discharged to Lake Austin. The holding tank/pond assists in settling any suspended solids in the dewatering water prior to discharge.

The potential impacts from the dewatering discharge are expected to be localised due the extensive area of Lake Austin and the relatively small discharge quantity from New Orient. Samples from all strata to be excavated during mining operations have been sampled and analysed for potential acid rock drainage. The results suggest there is no risk of acid rock drainage occurring. Water samples from below the surface of Lake Austin near the operation indicate that the EC of the water is 530 000  $\mu\text{S/cm}$ . This is more than double the expected discharge quality which is approximately 240 000  $\mu\text{S/cm}$ .

The quantity of water discharged to Lake Austin will be recorded monthly during operations, and entered into a log book. Water discharge to Lake Austin will also be sampled quarterly for total dissolved solids (TDS), total suspended solids (TSS) and pH. The discharge water quality will be monitored annually for a standard suite of metals. The discharge point to Lake Austin will be underlain with convoluted and ruffled matting to avoid scouring of the lake's bed.

Environmental Protection Act 1986 Decision Document: L8617/2011/2 File Number: 2011/010800



# 4 Decision table

Decision Document: L8617/2011/2

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

DECISION TABLE			
Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
General conditions	L – no conditions	Normal operation Conditions referencing the Code of Practice for the Storage and handling of dangerous goods have been removed as part of Departmental reform and updates to licence templates. In addition, the following assessment has resulted in a change to previous General Conditions.  Emission Description Emission: Uncontrolled release or spills of liquid chemicals, hydrocarbons and/or dewatering effluent.  Impact: Potential contamination to soils and surface water, and damage to vegetation.  Controls: No processing is occurring and therefore no liquid chemicals or hydrocarbons are stored on site. Dewatering effluent is limited in volume and is only released according to the conditions of this Licence.  Risk Assessment Consequence: Minor Likelihood: Rare Risk Rating: Low  Regulatory Controls A General Condition regarding maintenance of pollution control and monitoring equipment has been removed since:	General provisions of the Environmental Protection Act 1986.  Environmental Protection (Unauthorised Discharges) Regulations 2004.

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DECISION TA	DECISION TABLE				
Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents		
		<ul> <li>Pollution control equipment for the dewatering operation includes bunded pipelines and the discharge point Lake-bed protection. Both of these aspects are specified in other conditions (1.2.3 and 2.2.1) and visual inspection of both is also specified in condition 1.2.2.</li> <li>A General Condition regarding immediately recovering, or removing and disposing of spills of environmentally hazardous materials outside an engineered containment system has been removed since:         <ul> <li>No processing is occurring on the site and therefore there are no liquid chemicals or dangerous goods stored on site;</li> <li>Condition 1.2.1 limits the uses and handling of dewatering effluent; and</li> <li>Condition 1.2.3 ensures that where inspections identify that an appropriate level of environmental protection is not being maintained, hat corrective action is taken.</li> </ul> </li> <li>Residual Risk         <ul> <li>Consequence: Minor</li> <li>Likelihood: Rare</li> <li>Residual Risk Rating: Low</li> </ul> </li> </ul>			
Premises operation	L 1.2.1 – L1.2.3	Minor changes only have been made to the premises operation conditions during this amendment. Discharge points to Lake Austin require matting or rock armouring at the discharge point to reduce the risk of scouring of the lake bed. These erosion protective measures require visual inspections on a quarterly basis during discharge to ensure the integrity of the measures, and that the lake bed is protected. No other changes have been applied to conditions 1.2.1 – 1.2.3 under this amendment.  The production or design capacity limit has been added to the Licence under condition 1.2.4 to ensure the operation remains within the approved	General provisions of the Environmental Protection Act 1986.  Environmental Protection (Unauthorised Discharges) Regulations 2004.		

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DECISION TABI	DECISION TABLE			
Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)  capacity of the Licence. This is added as standard to updated format	Reference documents	
Emissions general	L 2.1.1	licences.  General emission conditions are included in the licence as standard.  Condition L2.1.1 requires the Licensee to record and investigate the exceedance of any descriptive or numerical limit specified in section 2 of the Licence.	General provisions of the Environmental Protection Act 1986.	
Point source emissions to air including monitoring	L – no conditions	There are no point source emissions to air from the premises that require regulation through this section. General provisions of the <i>Environmental Protection Act 1986</i> apply.	General provisions of the Environmental Protection Act 1986.	
Point source emissions to surface water including monitoring	L 2.2.1	Normal operation Emission Description Emission: Dewatering effluent from dewatering underground workings to facilitate bulk sampling or mining.  Impact: Localised, short-term water quality impacts may occur to Lake Austin if dewatering effluent contains elevated suspended sediment or metals.  Controls: Dewatering effluent is limited in volume, and will be discharged after being stored in a settling pond. Discharge points will be protected by erosion control measures to reduce suspended sediment load and prevent scouring of the Lake bed. Discharge volumes will be recorded and monitoring of water quality will be conducted.  Risk Assessment Consequence: Minor Likelihood: Unlikely Risk Rating: Moderate  Regulatory Controls	General provisions of the Environmental Protection Act 1986.  Environmental Protection (Unauthorised Discharges) Regulations 2004.	

Environmental Protection Act 1986

Decision Document: L8617/2011/2



DECISION TABLE				
Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents	
		Condition L2.2.1 is included in the Licence to identify the authorised location of the two dewatering discharge points, adding SW2 under this amendment. L2.2.1 also specifies that the dewatering discharge point be protected by matting or rock armouring to ensure the lake bed is not scoured by the discharging activity. Under this amendment, the monitoring parameters in condition L3.2.1 were updated to reflect:  i. No cyanide is used on the site as no processing is occurring.  Dewatering to facilitate exploration activities and bulk sampling are the only activities occurring on site and therefore the requirement to monitor WAD cyanide has been removed. This requirement would be added to the Licence again if processing were to start and cyanide were to be used; and  ii. A standard suite of metals has been added to the monitoring requirements on an annual basis; to assess potential impacts to Lake Austin from input of elevated metals. Where data shows that water quality is acceptable and stable, the need for this requirement should be reassessed.		
		Residual Risk Consequence: Minor Likelihood: Unlikely Residual Risk Rating: Moderate		
Point source emissions to groundwater including monitoring	L – no conditions	There are no point source emissions to groundwater authorised by this Licence. General provisions of the <i>Environmental Protection Act 1986</i> apply.	General provisions of the Environmental Protection Act 1986.	
Emissions to land including monitoring	L – no conditions	There are no point source emissions to land authorised by this Licence. General provisions of the <i>Environmental Protection Act 1986</i> apply.		

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DECISION TABL				
Works Approval / Licence section	Condition Justification (including risk description & decision methodology where relevant)  W = Works Approval L= Licence		Reference documents	
Fugitive emissions	L – no conditions	No significant fugitive emissions are anticipated during the dewatering operations. General provisions of the <i>Environmental Protection Act 1986</i> apply.		
Odour	L – no conditions	No odour emissions are anticipated during the dewatering operations.  General provisions of the <i>Environmental Protection Act 1986</i> apply.		
Noise	L – no conditions  No significant noise emissions are anticipated during the dewatering operations. The Licencee is required to comply with the <i>Environmental Protection (Noise) Regulations</i> 1997.		Environmental Protection (Noise) Regulations 1997	
Monitoring general	L 3.1.1 – 3.1.2	Condition 3.1.1 has been updated to remove requirements for WAD Cyanide monitoring since this is no longer a requirement of the Licence (since no processing is occurring and no cyanide is used on site). Condition 3.1.2 has been updated to cover annual (during discharge) monitoring added under condition 3.2.1.	General provisions of the Environmental Protection Act 1986.	
Monitoring of inputs and outputs	L – no conditions	No specified conditions relating to the monitoring of inputs or outputs are required to be added to the licence, since the volume of dewatering effluent discharge is captured under condition L3.2.1.	N/A	
Process monitoring	L – no conditions	No specified conditions relating to process monitoring are required to be added to the licence, since the volume of dewatering effluent discharge is captured under condition L3.2.1.	General provisions of the Environmental Protection Act 1986.	
Ambient quality monitoring	L – no conditions	Since surface water emission water volumes and quality are assessed under condition 3.2.1, and as the previous licence did not require ambient quality monitoring, no specified conditions have been included in this section.	General provisions of the Environmental Protection Act 1986.	
Meteorological monitoring	L – no conditions	No specified conditions have been included in this section.	N/A	

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DECISION TABLE				
Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents	
Improvements	L – no conditions	No improvement conditions are currently required.	N/A	
Information	Reporting and notification conditions are included as standard. Updates have been made to the requirements under current departmental reform and updates to licence templates. No other changes have been made during this amendment.		N/A	
Licence Duration	N/A	No changes have been made to the licence duration during this amendment.	N/A	

# 5 Advertisement and consultation table

Date	Event	Comments received/Notes	How comments were taken into consideration
12/11/2015	Proponent sent a copy of draft	Goldview Metals Limited replied on	N/A
	instrument	18/11/2015 to request the issue of the	
		amended licence with no changes.	

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# 6 Emissions and discharges risk assessment framework

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