



# Decision Document

## *Environmental Protection Act 1986, Part V*

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**Proponent:** Minjar Gold Pty Ltd

**Licence:** L8402/2009/2

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**Registered office:** Level 3  
50 Kings Park Road  
WEST PERTH 6005

**ACN:** 119 514 528

**Premises address:** Minjar Gold Mine  
Mining Lease M59/406  
Approximately 80 km south of Yalgoo  
YALGOO WA 6635

**Issue date:** Thursday, 29 January 2015

**Commencement date:** Sunday, 01 February 2015

**Expiry date:** Friday, 31 January 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 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:

Clint Joseph  
Licensing Officer

Decision Document authorised by:

Stephen Checker  
Manager Licensing (Midwest)



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## 1 Purpose of this Document

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

### **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 are justified in Section 4 of this document.

#### **Non standard conditions (NSC)**

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



## 2 Administrative summary

Administrative details		
Application type	Works Approval <input type="checkbox"/>	
	New Licence <input checked="" type="checkbox"/>	
	Licence amendment <input type="checkbox"/>	
	Works Approval amendment <input type="checkbox"/>	
Activities that cause the premises to become prescribed premises	<b>Category number(s)</b>	<b>Assessed design capacity</b>
	5	650,000 tonnes per annual period
Application verified	Date: 19/11/2014	
Application fee paid	Date: 28/11/2014	
Works Approval has been complied with	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>	
Compliance Certificate received	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>	
Commercial-in-confidence claim	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Commercial-in-confidence claim outcome		
Is the proposal a Major Resource Project?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Was the proposal referred to the Environmental Protection Authority (EPA) under Part IV of the <i>Environmental Protection Act 1986</i> ?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Referral decision No: Managed under Part V <input type="checkbox"/> Assessed under Part IV <input type="checkbox"/>
Is the proposal subject to Ministerial Conditions?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Ministerial statement No: EPA Report No:
Does the proposal involve a discharge of waste into a designated area (as defined in section 57 of the <i>Environmental Protection Act 1986</i> )?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Department of Water consulted Yes <input type="checkbox"/> No <input type="checkbox"/>
Is the Premises within an Environmental Protection Policy (EPP) Area	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
If Yes include details of which EPP(s) here.		
Is the Premises subject to any EPP requirements?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
If Yes, include details here, e.g. Site is subject to SO <sub>2</sub> requirements of Kwinana EPP.		





### **3 Executive summary of proposal and assessment**

The Minjar Gold Project (the Project) tenements were first systematically explored by Normandy Exploration in the late 1980s and 1990s, with Gindalbie Gold N.L. purchasing the Project in December 1999. Gindalbie Gold N.L. formed the operating company Minjar Gold and constructed a 500,000 tonne per annum carbon in leach (CIL) treatment facility in 2000 (later expanded to 650,000 tonne per annum).

The plant reverted to care and maintenance between July 2004 and July 2006 at which time Monarch Gold Mining Pty Ltd acquired the tenement leases. The Project remained under care and maintenance until purchased by Golden Stallion Resources in March 2009. Shandong Tianye Gold Mining Co. Ltd. purchased 51% of the Project in July 2009 from Golden Stallion Resources in a joint venture arrangement. The Project went into trial production in December 2009, and continued operation until May 2010 after which time the Project was placed and has remained in care and maintenance. The Project was later sold outright to Shandong Tianye Group.

During 2013 Minjar Gold transitioned from care and maintenance to Mining and processing operations. Minjar commenced mining on June 11 in existing pit areas prior to developing new pits at Riviera (Monaco Project) and Riley.

The Project is located in the South Murchison region of Western Australia, 500 km north-east of Perth and 60 km south of Yalgoo. The Project comprises approximately 1,400 km<sup>2</sup> of tenements containing a series of pre-existing open cut pits and waste rock. There is a 650,000 tonne per annum CIL treatment plant, a Tailings Storage Facility (TSF), accommodation village, roads and associated infrastructure.

The Project comprises an open cut operation using conventional dig and haul methods for the extraction of oxide (weathered material). Waste is placed in waste rock dumps and ore is transferred to a run of mine (ROM) pad using road trains. The ore process circuit is a conventional carbon in leach process comprising a primary crusher, coarse ore stockpile with reclaim via rill tower, a semi-autogenous grinding (SAG) ball mill, cyclones and a CIL elution circuit, which is used to recover gold. Tailings are delivered to a dedicated two-cell TSF by a tailings discharge line and ring main circuit. Water is reclaimed from the tailings dam through a central decant and diverted to retention dams for reuse in the process.

The Project is supported by an existing haul road and a 174 person accommodation camp. Power is supplied through a transmission line connected to the adjacent Golden Grove Operation. Water (domestic and process) is sourced from open pit voids. There is no pit de-watering discharge.



## 4 Decision table

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	OSC or NSC	Justification (including risk description & decision methodology where relevant)	Reference documents
General conditions	N/A	N/A	<p>General conditions have not been reassessed as part of this licence reissue. Standard general conditions apply.</p> <p>Conditions 8(b), 10 and 12(a) on the previous licence are carried over as SC 1.2.3, 1.2.4 and 1.2.5.</p>	<p>General provisions of the <i>Environmental Protection Act 1986</i>.</p> <p><i>Environmental Protection (Unauthorised Discharges) Regulations 2004</i>.</p>
Premises operation	L1.3.1 – L1.3.7	NSC	<p>All conditions from the previous Licence, which relate to the management of the tailings dams, have been converted into the new licence as non standard conditions.</p> <p>Condition 5(a) and 5(b) on the previous licence are carried over as NSC 1.3.4.</p> <p>Condition 6 on the previous licence is carried over as NSC 1.3.3(c).</p> <p>Conditions 7(a) – 7(d) on the previous licence is carried over as NSC 1.3.6 (a) – (e).</p> <p>Condition 7(e) on the previous licence is carried over as NSC 1.3.5.</p> <p>Condition 8(a) on the previous licence is carried over as NSC 1.3.3(b).</p> <p>Condition 9 on the previous licence is carried over as NSC 1.3.3(a).</p> <p>Condition 12(b) – (d) on the previous licence is carried over as NSC 1.3.5 (a)- (c).</p>	





DECISION TABLE				
Works Approval / Licence section	Condition number W = Works Approval L = Licence	OSC or NSC	Justification (including risk description & decision methodology where relevant)	Reference documents
Emissions general	N/A	N/A	General emissions have not been reassessed as part of this licence reissue. SC 1.2.1 applies.	General provisions of the <i>Environmental Protection Act 1986</i> .  <i>Environmental Protection (Unauthorised Discharges Regulations, 2004)</i> .
Point source emissions to air including monitoring	N/A	N/A	Point source air emissions and monitoring have not been reassessed as part of this licence reissue. SC 1.2.1 applies.  The previous licence did not impose any conditions for emissions to air including monitoring.	
Point source emissions to surface water including monitoring	N	N/A	Point source emissions to surface water and monitoring have not been reassessed as part of this licence reissue. SC 1.2.1 applies.	
Point source emissions to groundwater including monitoring	N/A	N/A	Point source emissions to groundwater and monitoring have not been reassessed as part of this licence reissue. SC 1.2.1 applies.	
Emissions to land including monitoring	N/A	N/A	Emissions to land and monitoring have not been reassessed as part of this licence reissue. SC 1.2.1 applies.	
Fugitive emissions	L2.6.1	OSC	All conditions from the previous Licence, which relate to the fugitive emissions of dust have been converted into the new licence as an optional standard condition.  Condition 4(1) – (vi) on the previous licence is carried over as OSC 2.6.1.	



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	N/A	N/A	Odour has not been reassessed as part of this licence reissue. As the previous licence did not impose controls on odour, no specified conditions have been included in this section. SC 1.2.1 applies.	General provisions of the <i>Environmental Protection Act 1986</i> .
Noise	N/A	N/A	Noise has not been reassessed as part of this licence reissue. As the previous licence did not impose controls on noise, no specified conditions have been included in this section. The <i>Environmental Protection (Noise) Regulations 1997</i> and SC 1.2.1 apply.	<i>Environmental Protection (Noise) Regulations 1997</i> General provisions of the <i>Environmental Protection Act 1986</i>
Monitoring general	L3.1.1	OSC	Conditions 13(b) and 13(c) on the previous licence are carried over as OSC 3.1.1.	General provisions of the <i>Environmental Protection Act 1986</i> .
Monitoring of inputs and outputs	N/A	N/A	Monitoring requirements have not been reassessed as part of this licence reissue.  As the previous licence did not require monitoring of inputs and outputs no specified conditions have been included in this section.	
Process monitoring	N/A	N/A	Process monitoring not been reassessed as part of this licence reissue.  As the previous licence did not require any process monitoring, no specified conditions have been included in this section.	



<b>DECISION TABLE</b>				
<b>Works Approval / Licence section</b>	<b>Condition number W = Works Approval L= Licence</b>	<b>OSC or NSC</b>	<b>Justification (including risk description &amp; decision methodology where relevant)</b>	<b>Reference documents</b>
<b>Ambient quality monitoring</b>	L3.8.1	OSC	Ambient quality monitoring requirements have not been reassessed as part of this licence reissue.  Conditions 13(a) and 14 on the previous licence are carried over as OSC L3.8.1	
<b>Meteorological monitoring</b>	N/A	N/A	Monitoring requirements have not been reassessed as part of this licence reissue.  As the previous licence did not require meteorological monitoring no specified conditions have been included in this section.	General provisions of the <i>Environmental Protection Act 1986</i> .  <i>Environmental Protection (Unauthorised Discharges Regulations, 2004)</i> .
<b>Improvements</b>	N/A	N/A	No improvement conditions required.	
<b>Information</b>	L5.1.1-5.1.4 L5.2.1, 5.2.2, L5.3.1	N/A	SC 5.1.3 replaces condition 3 of the previous licence. SC 5.1.4 and 5.2.1 replace conditions 2(a) – 2(e) of the previous licence. SC 5.3.1 replaces conditions 1(a) and 1(b) (i) – (v) of the previous licence.	





## 5 Advertisement and consultation table

Date	Event	Comments received/Notes	How comments were taken into consideration
8/12/2014	Application advertised in West Australian	None received	N/A
28/01/2015	Proponent sent a copy of draft instrument	Comments received	Draft licence amended to incorporate comments.



## 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	Severity				
	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