



Licence Number	L7969/2004/3
Licence Holder	Northern Star Resources Ltd
ACN	092 832 892
File Number:	DER2013/0000991
Premises	Paulsens Gold Project Nanutarra-Munjina Road Mining Leases M08/99 and M08/196 PARABURDOO WA 6754
Date of Amendment	24 November 2017

Amendment

The Chief Executive Officer (CEO) of the Department of Water and Environmental Regulation (DWER) has amended the above Licence in accordance with section 59 of the *Environmental Protection Act 1986* as set out in this Amendment Notice. This Amendment Notice constitutes written notice of the amendment in accordance with section 59B(9) of the EP Act and follows.

Date signed: 24 November 2017

Stephen Checker
MANAGER LICENSING (WASTE INDUSTRIES)

an officer delegated under section 20 of the *Environmental Protection Act 1986* (WA)

Definitions and interpretation

Definitions

In this Amendment Notice, the terms in Table 1 have the meanings defined.

Table 1: Definitions

Term	Definition
AACR	Annual Audit Compliance Report
ACN	Australian Company Number
AER	Annual Environment Report
Category/ Categories/ Cat.	categories of Prescribed Premises as set out in Schedule 1 of the EP Regulations
CEO	means Chief Executive Officer. CEO for the purposes of notification means: Director General Department Administering the <i>Environmental Protection Act 1986</i> Locked Bag 33 Cloisters Square PERTH WA 6850 info@der.wa.gov.au
CS Act	<i>Contaminated Sites Act 2003 (WA)</i>
Decision Report	refers to this document
Delegated Officer	an officer under section 20 of the EP Act
DWER	Department of Water and Environmental Regulation
EPA	Environmental Protection Authority
EP Act	<i>Environmental Protection Act 1986 (WA)</i>
EP Regulations	<i>Environmental Protection Regulations 1987 (WA)</i>
Existing Licence	The Licence issued under Part V, Division 3 of the EP Act and in force prior to the commencement of and during this Review
Licence Holder	Water Corporation
Minister	the Minister responsible for the EP Act and associated regulations
MS	Ministerial Statement
Occupier	has the same meaning given to that term under the EP Act.
Prescribed Premises	has the same meaning given to that term under the EP Act.

Premises	refers to the premises to which this Decision Report applies, as specified at the front of this Decision Report.
Risk Event	as described in <i>Guidance Statement: Risk Assessment</i>
UDR	<i>Environmental Protection (Unauthorised Discharges) Regulations 2004 (WA)</i>

Amendment Notice

This amendment is made pursuant to section 59 of the *Environmental Protection Act 1986* (EP Act) to amend the Licence issued under the EP Act for a prescribed premises as set out below. This notice of amendment is given under section 59B (9) of the EP Act.

This notice is limited to an amendment to.

The following guidance statements have informed the decision made on this amendment

- *Guidance Statement: Regulatory Principles (July 2015)*
- *Guidance Statement: Setting Conditions (October 2015)*
- *Guidance Statement: Land Use Planning (February 2017)*
- *Guidance Statement: Licence Duration (August 2016)*
- *Guidance Statement: Decision Making (November 2016)*
- *Guidance Statement: Risk Assessment (November 2016)*
- *Guidance Statement: Environmental Siting (November 2016)*

Amendment description

Condition 14 (Table 5) of the Paulsens Gold Project licence (L7969/2004/3) required the Licence Holder Northern Star Resources Pty Limited to provide monthly cover to landfilled putrescible waste with minimum of 200mm of clean fill or inert waste type 1.

DWER received an application for a licence amendment from Northern Star Resources Pty Limited on 13 July 2017 requesting an amendment to remove or alter the requirement to monthly cover landfilled putrescible waste with minimum of 200mm clean fill or inert waste type 1.

The application states that the putrescible landfill trench is not able to meet the above condition since machinery available on site, used for cover applications is not able to reach far enough over the edge of the trench to bury the waste. Current management practices include periodically hiring and utilising an excavator to compact and push down the waste when it has been hired for other use around the site. The Licence holder has also proposed burying the compacted wastes where appropriate.

Other approvals

Northern Star Resources Pty Limited advised DWER on 13 October 2017 that no other approval for the proposed amendment is required.

Amendment history

Table 3 provides the amendment history for L7969/2004/3.

Table 3: Licence amendments

Instrument	Issued	Amendment
L7969/2004/3	21/11/2013	Amendment issued to correct the company registered business address.
L7969/2004/3	15/09/2016	Amendment issued for the following: Removal of mine dewatering conditions and category 6;

		<p>Reduction in the frequency of tailings monitoring;;</p> <p>Increase in the TDS limit of ambient groundwater monitoring from 3500mg/L up to 10,000mg/L;</p> <p>Addition of groundwater monitoring bores and Production bore;</p> <p>Addition of category 63 and 64 to the licence;</p> <p>Addition of category 52 to the licence as upgrades involved the installation of three additional skid mounted container style diesel generators;</p> <p>Addition of improvement conditions to address groundwater concerns; and</p> <p>Update to definitions and removal of targets as per CEO instructions.</p>
L7969/2004/3	20/10/2016	<p>Amendment Notice 1</p> <p>Licence amendment to change Licensee's registered business address</p>
L7969/2004/3	15/12/2016	<p>Amendment Noise 2</p> <p>Licence amendment to update the landfill location map in Attachment 5 of licence</p>
L7969/2004/3	21/04/2017	<p>Amendment Noise 3</p> <p>Licence amendment to review and update the ambient groundwater monitoring requirements for the TSF</p>
L7969/2004/3	24/11/2017	<p>Amendment Noise 4</p> <p>Licence amendment to alter Licence Condition 14 relating to applying and maintaining monthly cover on landfilled putrescible waste.</p>

Location and receptors

Table 4 below lists the relevant sensitive land uses in the vicinity of the Prescribed Premises which may be receptors relevant to the proposed amendment.

Table 4: Receptors and distance from activity boundary

Residential and sensitive premises	Distance from Prescribed Premises
Nanutarra Roadhouse	Approximately 90km from the prescribed premises boundary
The town site of Paraburdoo	Approximately 180 km from the prescribed premises boundary

Risk assessment

Table 5 below describes the Risk Events associated with the amendment consistent with the *Guidance Statement: Risk Assessments*. Table 5 identifies whether the emissions present a material risk to public health or the environment, requiring regulatory controls.

Table 5: Risk assessment for proposed amendments during operation

Source/Activities		Risk Event				Consequence rating	Likelihood rating	Risk	Reasoning
		Potential emissions	Potential receptors	Potential pathway	Potential adverse impacts				
Cat 64 Landfill site	Active Cell- Acceptance and disposal of putrescible waste	<i>Dust: from moving vehicles associated to the acceptance and disposal of waste</i>	Residential sensitive receptors: No residences or sensitive land uses within 50 km	Air/ Wind: Dust generated by light and heavy vehicles at the Premises and while disposing waste into the trench.	<i>Elevated particulates (PM₁₀ and PM_{2.5}) can impact health and amenity of sensitive receptors</i>	<i>Slight</i>	<i>Unlikely</i>	<i>Low</i>	<i>Fugitive dust emissions are not expected to significantly impact sensitive premises from vehicle movement on site when disposing waste into the trench. The nearest sensitive residential receptor is situated approximately 90 km from the site.</i> <i>The Delegated Officer also considers that the provisions of Section 49 of the Environmental Protection Act 1986 are sufficient to regulate dust emissions during operation; therefore the risk is considered low and does not require any further regulatory controls.</i>
		Noise: associated with acceptance and disposal of waste	Residential sensitive receptors: No residences or sensitive land uses within 50 km	Air/ Wind: Noise generated by vehicles at the premises	<i>Amenity to nearby noise sensitive receptors</i>	<i>Slight</i>	<i>Unlikely</i>	<i>Low</i>	<i>Noise emissions are not expected to significantly impact sensitive premises from additional light and heavy vehicle movement on site when vehicles drop off waste. The nearest sensitive residential receptor is situated approximately 80 km from the site.</i> <i>The Delegated Officer also considers that the Licence Holder has an ongoing requirement to comply with</i>

									<i>the Prescribed standard for noise emissions, as set out in the Environmental Protection (Noise) Regulation 1997.</i>
		Odour: from waste accepted and disposed onsite	Residential sensitive receptors: No residences or sensitive land uses within 50 km	Air/ Wind: Odour emitted from decomposing waste	<i>Amenity Impacts</i>	<i>Slight</i>	<i>Unlikely</i>	<i>Low</i>	<p><i>The Delegated Officer noted that DWER has no record of odour complaints from the landfill site.</i></p> <p><i>The Delegated Officer considers that the provisions of Section 49 of the Environmental Protection Act 1986 are sufficient to regulate odour emissions during operation; therefore the risk is considered low and does not require any further regulatory controls.</i></p>
		Windblown waste: from non-burial of putrescible waste	<i>Terrestrial ecosystems</i>	Air/ Wind: transported through air	<i>Amenity Impacts, soil contamination</i>	<i>Slight</i>	<i>Unlikely</i>	<i>Low</i>	<p><i>Current licence condition 16 requires the Licensee to ensure that windblown waste is contained within the boundary of the landfill area and that wind-blown waste is returned to the tipping area on at least a weekly basis. The Delegated Officer has also reviewed the information regarding the risk of windblown waste contaminating the surrounding land and has found that the current trench is quite deep, surrounded by earthen bund and metal fencing which has prevented windblown waste and fauna ingress since its construction.</i></p> <p><i>The Delegated Officer considers the provisions of the Environmental Protection (Rural Landfill) Regulations 2002 and Litter Act 1979 sufficient regulatory control to manage windblown waste and prevention of litter.</i></p>

									Therefore considers the design and management of the landfill for disposal as low risk.
		Vermin: from non-burial of putrescible waste; potential access and spreading of waste by avifauna	<i>Terrestrial ecosystems</i>	Direct Contact	<i>Amenity Impacts, soil contamination</i>	<i>Minor</i>	<i>Possible</i>	<i>Moderate</i>	The Delegated Officer has determined that the overall rating for the risk of vermin/waste spreading impacts on terrestrial ecosystems is moderate.

Decision

The Delegated Officer has considered the proposed changes and accepts that the amendments are required to ensure that condition 14 is enforceable/compliable. The changes present a low risk to human health and a moderate risk to the environment. The proposed cover variation therefore requires three monthly cover and is limited to the current cell only. Table 5 of the Licence has been amended via this Notice.

DWER intends to commence undertaking a detailed risk review of the Licence to align the Licence with the risk based Regulatory Framework. The full risk based review will incorporate all the amendments into the Revised Licence.

Licence Holder's comments

The Licence Holder was provided with the draft Amendment Notice on 19 October 2017. The Licence Holder responded on 23 November 2017 waiving the remaining comment period.

Amendment

- Condition 14 (Table 5) of the Licence is amended by the deletion of the text shown in strikethrough below and the insertion of the red text shown in underline below:

Table 5: Cover requirements

Waste type	Material	Depth	Timescale
Putrescible wastes	Clean fill and Inert Waste Type 1	A minimum of 200 mm. No waste is to be left exposed after covering	Cover shall be applied monthly <u>three monthly until the current putrescible waste trench (active as at 16 November 2017) is completed.</u> <u>Monthly cover is required for any other putrescible waste disposal.</u>
Inert Waste Type 2	Clean fill and Inert Waste Type 1	500mm	Once 99 tyres have been stored.
Contaminated solid wastes	Clean fill and Inert Waste Type 1	100mm	As soon as practicable after deposit.
Special Waste Type 1	Type 1 Inert waste, soil or clay	300mm	As soon as practicable after deposit and prior to compaction.
		1000mm	By the end of the working day in which the asbestos waste was deposited.
Special Waste Type 2		100mm	As soon as practicable after deposit.

Note 1: Additional requirements for the covering of tyres are set out in the *Environmental Protection Regulations 1987*.

Appendix 1: Key documents

	Document title	In text ref	Availability
1	Licence L7969/2004/3 – Paulsens Gold Project	L7969/2004/3	accessed at www.dwer.wa.gov.au
2	DER, July 2015. <i>Guidance Statement: Regulatory principles</i> . Department of Environment Regulation, Perth.	DER 2015a	accessed at www.dwer.wa.gov.au
3	DER, October 2015. <i>Guidance Statement: Setting conditions</i> . Department of Environment Regulation, Perth.	DER 2015b	
4	DER, August 2016. <i>Guidance Statement: Licence duration</i> . Department of Environment Regulation, Perth.	DER 2016a	
5	DER, November 2016. <i>Guidance Statement: Risk Assessments</i> . Department of Environment Regulation, Perth.	DER 2016b	
6	DER, November 2016. <i>Guidance Statement: Decision Making</i> . Department of Environment Regulation, Perth.	DER 2016c	