

Amendment Report

Application for Licence Amendment

Part V Division 3 of the Environmental Protection Act 1986

Licence Number L8907/2015/1

Licence Holder Big Bell Gold Operations Pty Ltd

ACN 090 642 809

File Number DER2015/001593

Premises Cue Gold Operations - Day Dawn

CUE WA 6640

Legal description -

Mining tenements M21/7, M21/10, M21/14, M21/44, M21/65

and M21/89

As defined by the Premises maps attached to the Revised

Licence

Date of Report 19/12/2024

Decision Revised licence granted

A/MANAGER, RESOURCE INDUSTRIES **INDUSTRY REGULATION (STATEWIDE DELIVERY)**

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

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1. Decision summary

Licence L8907/2015/1 is held by Big Bell Gold Operations Pty Ltd (Licence Holder) for the Cue Gold Operations – Day Dawn (the Premises), located within Mining tenements M21/7, M21/10, M21/14, M21/44, M21/65 and M21/89.

This Amendment Report documents the assessment of potential risks to the environment and public health from proposed changes to the emissions and discharges during the operation of the Premises. As a result of this assessment, Revised Licence L8907/2015/1 has been granted.

The Revised Licence issued as a result of this amendment consolidates and supersedes the existing Licence previously granted in relation to the Premises.

2. Scope of assessment

2.1 Regulatory framework

In completing the assessment documented in this Amendment Report, the department has considered and given due regard to its Regulatory Framework and relevant policy documents which are available at https://dwer.wa.gov.au/regulatory-documents.

2.2 Amendment summary

On 22/08/2024, the Licence Holder submitted an application to the department to amend Licence L8907/2015/1 under section 59 and 59B of the *Environmental Protection Act 1986* (EP Act). The following amendments are being sought:

• Include category 64: Class II landfill to the licence

Table 1 below outlines the proposed changes to the existing Licence.

Table 1: Proposed throughput changes

<u> </u>		Proposed throughput capacity	Description of proposed amendment	
64	N/A	600 tonnes per annual period	92 tonnes of putrescible waste and 262 tonnes of inert industrial waste is predicted to be disposed of.	

The Licence Holder is proposing to establish three separate landfill areas within the mining envelope within tenements M21/7 and M21/44. All three sites will be located within previously disturbed areas such as waste rock dumps and ex-tailing deposits. The first landfill is located on top of Try Again waste rock dump, of which the northern section has been historically used as a landfill. The two remaining proposed landfill areas are located within the Great Fingall Historic Tailings. The three proposed landfills will cover a total area of 6.86 hectares (ha). All activities are within previously disturbed areas.

The locations of the proposed landfills are shown within the premises boundary in Figure 1 below.

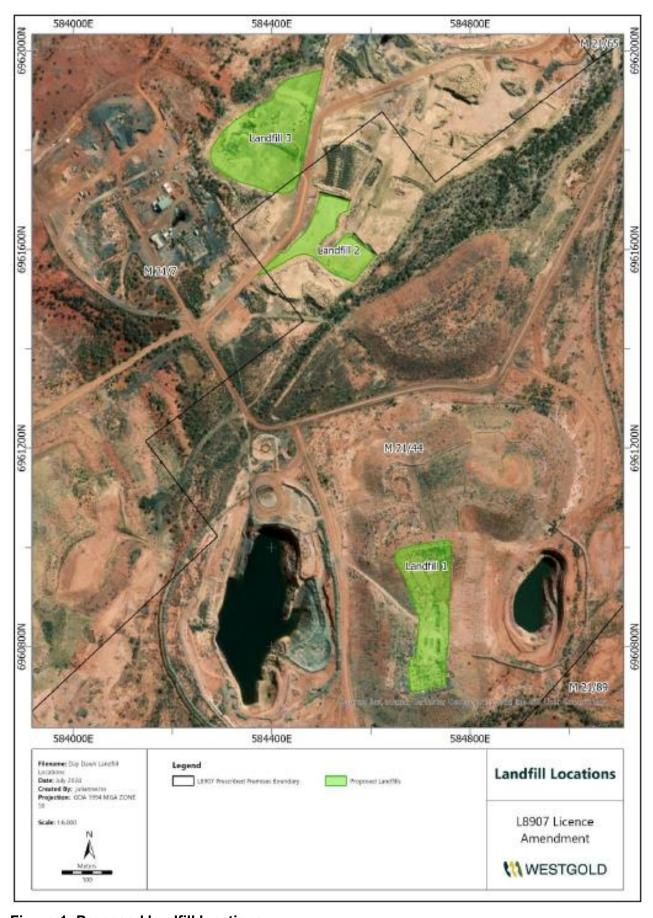


Figure 1: Proposed landfill locations

The three proposed putrescible landfill locations will be constructed at a designated sign-posted location using a trench system with the following constraints:

- Constructed landfill trenches will be 30 metres (m) length by 3m width by 4m depth;
- Windrows will be constructed around three sides of each trench to prevent stormwater ingress;
- Where specified, a fence will be installed surrounding the landfill area to create an
 effective barrier to fauna and minimise the likelihood of waste getting washed or blown
 off-site;
- Clear signage at the entrance to the facility will outline what waste is permitted to be disposed – all food and office waste will continue to be disposed off-site in the Cue Town landfill; and
- A rollover bund will be constructed at the entrance to the facility to prevent stormwater ingress.

It is expected that two landfill trenches will be used each year for the disposal of non-hazardous, putrescible and inert industrial waste. Each trench is 360 cubic meters (m³) in volume. The Licence Holder estimates that 363 kilograms of waste will be buried per cubic metre. An estimated 131 tonnes of waste will be deposited in each trench, an estimated 262 tonnes annually.

Landfill 1 is on top of a waste rock dump and currently part of a historic landfill. To date, deposition to the facility has not exceeded the minimum production of 20 tonnes of design capacity listed in Schedule 1 of the Environmental Protection Regulations 1987, therefore it was not listed as a prescribed category under licence L8907/2015/1.

Landfill 2, located within an excavated area of the Great Fingall historic tailings providing high walls and a secure containment area for Class II waste disposal.

Landfill 3, located on top of an elevated area of Historic Great Fingall Tailings. The facility will be adequately fenced to provide an effective barrier to fauna and minimise the likelihood of waste getting washed or blown off-site.

Only one landfill location will be used at a time until maximum capacity is reached prior to disposing waste in the next landfill.

The licence holder has stated that the landfill will be constructed and managed in accordance with *Environmental Protection (Rural Landfill) Regulations 2002.*

2.3 CEO-initiated amendment

In July 2020, the Government announced a package of regulatory reforms to streamline approval processes and to aid economic recovery post-COVID-19. With these reforms, the CEO implemented an administrative renewal process to fast-track the renewals for licences determined to be lower risk.

This work has reduced timeframes of assessments, however, the CEO proposed to streamline the process further. Where identified as being appropriate to action, the department is extending the duration of licences that are due to expire up to 30 June 2026 (i.e., amend to extend). This licence has been identified as a licence suitable to process as an administrative extension to the licence duration.

This CEO-initiated amendment is limited to extending the duration of the licence, as well as aligning the expiry date of the licence with the anniversary date of the licence to streamline annual fee payments. As such, the expiry date of amended licence L8907/2015/1 has been amended from 18 October 2025 to 14 October 2035. The Licence Holder was notified of the CEO-initiated amendment on 10 December 2024.

3. Risk assessment

The department assesses the risks of emissions from prescribed premises and identifies the potential source, pathway and impact to receptors in accordance with the *Guideline: Risk* assessments (DWER 2020).

To establish a Risk Event there must be an emission, a receptor which may be exposed to that emission through an identified actual or likely pathway, and a potential adverse effect to the receptor from exposure to that emission.

3.1 Source-pathways and receptors

3.1.1 Emissions and controls

The key emissions and associated actual or likely pathway during construction and operation of the landfill cells which have been considered in this Amendment Report are detailed in Table 2 below. Table 2 also details the proposed control measures the Licence Holder has proposed to assist in controlling these emissions, where necessary.

Table 2: Licence Holder controls

Emission	Sources	Potential pathways	Proposed controls					
Construction								
Dust	Excavation of cells, vehicle movements.	Air/windborne pathway	No controls proposed.					
Noise	Construction vehicles.	Air/windborne pathway	No controls proposed.					
Operation								
Dust	Exposed cells and overburden, vehicle movements.	Air/windborne pathway	No controls proposed.					
Odour	Exposed putrescible wastes.	Air/windborne pathway	Waste will be covered monthly with inert fill					
Leachate	Buried wastes.	Soil infiltration to localised groundwater	Bunding around individual cells to separate stormwater from waste reducing the generation of leachate					
			Stormwater will be directed away from the active landfill area. If it is not possible to direct water around the landfill area, water will be retained within the landfill area if it has come into contact with waste; Waste will be covered monthly with inert fill					
Windblown waste	Landfill trench	Air/windborne pathway	Fencing installed around cells to limit wind- blown waste leaving the site.					
			Training and signage at landfill entrance to inform employees of management obligations such as waste recovery and regular inspections of the facility.					

Emission	Sources	Potential pathways	Proposed controls
Construction			
			Waste will be covered monthly with inert fill Windblown waste will be returned to the tipping area on a at least monthly basis.

3.1.2 Receptors

In accordance with the *Guideline: Risk assessments* (DWER 2020), the Delegated Officer has excluded employees, visitors and contractors of the Licence Holder's from its assessment. Protection of these parties often involves different exposure risks and prevention strategies and is provided for under other state legislation.

Table 3 below provides a summary of potential human and environmental receptors that may be impacted as a result of activities upon or emission and discharges from the prescribed premises (*Guideline: Environmental siting* (DWER 2020)).

Table 3: Sensitive human and environmental receptors and distance from prescribed activity

Human receptors	Distance from prescribed activity
Cue Townsite	7km north-east of the Landfill 3 site. Screened out due to distance
Dairy Well Homestead	3km west of the Landfill 3 site.
Environmental receptors	Distance from prescribed activity
Public Drinking Water Source Area - Cue Water Reserve	7km north-east of the closest proposed landfill Screened out due to distance
Environmentally Sensitive Areas (ESA)	Five ESAs are located near Cue, 7km north-east of the proposed landfill. Screened out due to distance
Localised groundwater	The pre-mining levels of groundwater are estimated to be approximately 10 metres below ground level (BGL).
	Due to mining activities spanning over 100 years, the current groundwater is between 40 and 150 metres BGL at various sites within the premises.

3.2 Risk ratings

Risk ratings have been assessed in accordance with the *Guideline: Risk Assessments* (DWER 2020) for those emission sources which are proposed to change and takes into account potential source-pathway and receptor linkages as identified in Section 3.1. Where linkages are incomplete they have not been considered further in the risk assessment.

Where the Licence Holder has proposed mitigation measures/controls (as detailed in Section 3.1), these have been considered when determining the final risk rating. Where the Delegated Officer considers the Licence Holder's proposed controls to be critical to maintaining an acceptable level of risk, these will be incorporated into the licence as regulatory controls.

Additional regulatory controls may be imposed where the Licence Holder's controls are not deemed sufficient. Where this is the case the need for additional controls will be documented and justified in Table 4.

The Revised Licence L8907/2015/1 that accompanies this Amendment Report authorises emissions associated with the operation of the Premises i.e. dewatering, screening and landfill activities.

The conditions in the Revised Licence have been determined in accordance with *Guidance Statement: Setting Conditions* (DER 2015).

Table 4: Risk assessment of potential emissions and discharges from the Premises during construction and operation

					1			
Risk Event						Licence		
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Licence Holder's controls	C = consequence L = likelihood	Holder's controls sufficient?	Conditions ² of licence	Justification for additional regulatory controls
Construction								
Excavation of cells, placement of fencing and cell closure.	Dust	pathway causing Hominimpacts to health	Dairy Well Homestead, 3km west of the landfills	Refer to Section 3.1	C = Slight L = Rare Low Risk	Y	N/A	Due to the separation distance of 3km between the proposed landfills and the nearest receptor, dust and noise emissions from construction can be managed under general provisions of the EP Act and Regulations. Construction of the landfill cells will be in accordance with Environmental Protection (Rural Landfill) Regulations 2002.
	Noise			Refer to Section 3.1	C = Slight L = Rare Low Risk	Y		
Operation								
Disposal of waste and	Dust	Air/windborne pathway causing impacts to health and amenity	Dairy Well Homestead, 3km west of the landfills	Refer to Section 3.1	C = Slight L = Rare Low Risk	Y	N/A	Due to the small size of the landfills and a separation distance to sensitive receptors of over 3km, additional dust conditions are not required. Management of the landfill cells will be in accordance with Environmental Protection (Rural Landfill) Regulations 2002.
covering of waste.	Odour	Air/windborne pathway causing impacts to health and amenity	Dairy Well Homestead, 3km west of the landfills	Refer to Section 3.1	C = Slight L = Rare Low Risk	Y	Condition 1.2.8 – cover requirements	Due to the small size of the landfill and a separation distance to sensitive receptors of over 3km, it is unlikely that odour emissions will impact receptors. Condition 1.2.8 has been added to ensure waste is covered on a regular basis. Management of the landfill cells will be

Risk Event		Risk rating ¹	Licence					
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Licence Holder's controls	C = consequence L = likelihood	Holder's controls sufficient?	Conditions ² of licence	Justification for additional regulatory controls
								in accordance with Environmental Protection (Rural Landfill) Regulations 2002.
	Leachate	Overland runoff potentially causing ecosystem disturbance or impacting surface water quality	Localised groundwater	Refer to Section 3.1	C = Minor L = Rare Low Risk	Y	Condition 1.2.7 Condition 1.2.8	Due to the mostly inert nature of the waste and a separation distance to groundwater of over 40 metres, it is unlikely that leachate will impact groundwater. Standard conditions around waste management i.e bunding of trenches and regular covering of waste have been conditioned on the licence.
	Wind-blown waste	Air/windborne pathway causing impacts to health and amenity	Localised fauna	Refer to Section 3.1	C = Minor L = Unlikely Medium Risk	Y	Condition 1.2.7 Condition 1.2.8	Standard conditions around covering of waste and returning windblown waste to the tipping face on a regular basis have been added to the licence. Management of the landfill cells will be in accordance with Environmental Protection (Rural Landfill) Regulations 2002.

Note 1: Consequence ratings, likelihood ratings and risk descriptions are detailed in the Guideline: Risk assessments (DWER 2020).

Note 2: Proposed Licence Holder's controls are depicted by standard text. **Bold and underline text** depicts additional regulatory controls imposed by department.

4. Consultation

Table 5 provides a summary of the consultation undertaken by the department.

Table 5: Consultation

Consultation method	Comments received	Department response
Local Government Authority Shire of Cue advised of proposal (22/10/2024)	N/A	N/A
Department of Energy Mines, Industry Regulation and Safety (DEMIRS) advised of proposal (22/10/2024)	DEMIRS responded on 24/10/2024 with the following comments: A Mining Proposal (MP) (Reg ID 128482 - submitted by Big Bell Gold Operations Pty Ltd (100% owned by Westgold Resources Ltd)) dated 20 August 2024 is currently under assessment by the Department of Energy Mines, Industry Regulation and Safety (DEMIRS). The proposal contains previously approved landfill areas on tenement M 21/44 and is seeking approval of new landfill activity area (2.1ha) on M 21/7. The risk assessment and proposed risk treatments within the Mining Proposal appear to be consistent with those proposed under the L8907/2015/1 licence amendment application. If landfill activities are undertaken in-line with DWER licencing requirements and risk treatments outlined within the MP, DEMIRS does not anticipate any significant environmental concerns	Noted.
Licence Holder was provided with draft amendment on 02/12/2024	from approval of the amendment. Comments were received from the Licence Holder on 11/12/2024 waiving the remaining comments period.	N/A

5. Conclusion

Based on the assessment in this Amendment Report, the Delegated Officer has determined that a Revised Licence will be granted, subject to conditions commensurate with the determined controls and necessary for administration and reporting requirements.

5.1 Summary of amendments

Table 6 provides a summary of the proposed amendments and will act as record of implemented changes. All proposed changes have been incorporated into the Revised Licence as part of the amendment process.

Table 6: Summary of licence amendments

Condition no.	Proposed amendments
Cover Page	Updated the expiry date of the licence from 18/10/2025 to 14/10/2035;
	Include Category 64 to the Prescribed premises category description table; and
	Change the assessed production capacity of Category 12 from per <i>year</i> to per <i>annual period</i> as per current policy.
1.1	Included the description for Annual Audit Compliance Report and Department; DWER.
1.2.7 (Table 1.2.3)	Included the infrastructure and operational requirements for the three proposed landfills to the <i>Infrastructure and equipment requirements</i> table.
1.2.8 (Table 1.2.4)	Included a condition and table to the licence regulating the covering of waste at the proposed landfills.
1.2.9	Changed the numbering of this condition from 1.2.8 to 1.2.9 to accommodate the above condition.
4.2.1 (Table 4.2.1)	Included a requirement to report to the CEO the volume of waste disposed of within the proposed landfills.
	Removed the note to Schedule 2. Schedule 2 was removed in the previous amendment, but this note was not.
4.2.3 (Table 4.2.2)	Removed the note to Schedule 2. Schedule 2 was removed in the previous amendment, but this note was not.
4.3.1 (Table 4.3.1)	Removed the note to Schedule 2. Schedule 2 was removed in the previous amendment, but this note was not.
Schedule 1: Maps	Included the map labeled Landfill Location Map as it is referenced in Table 1.2.3 of this licence.

References

- 1. Department of Environment Regulation (DER) 2015, *Guidance Statement: Setting Conditions*, Perth, Western Australia.
- 2. Department of Water and Environmental Regulation (DWER) 2020, *Guideline: Environmental Siting*, Perth, Western Australia.
- 3. DWER 2020, Guideline: Risk Assessments, Perth, Western Australia.
- 4. Westgold Resources Ltd (Westgold) 21 August 2024, Supporting Information Amendment to Licence L8907/2015/1 Day Dawn Project, Big Bell Gold Operations Pty Ltd, Perth, WA.
- 5. Rockwater 2022, *Impacts of Mining Operations on Groundwater Day Dawn,* Rockwater, Wembley, Western Australia.