

# **Amendment Report**

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Licence Number L8644/2012/1

**Licence Holder** Big Bell Gold Operations Pty Ltd

**ACN** 090 642 809

**File Number:** 2012/002162-1

Premises Cue Gold Operations – Tuckabianna Project

Mining Tenements: M20/55, M20/108, M20/208 and

M20/195, CUE WA 6640

As depicted in Schedule 1

Date of Report 11 December 2019

Decision Granted amended licence

## 1. Definitions and interpretation

#### **Definitions**

In this Amendment Report, 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
Amendment Report	refers to this document
Amendment Notice	means an amendment granted under s.59 of the EP Act in accordance with the procedure set out in s.59B of the EP Act
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 Environmental Protection Act 1986 Locked Bag 10 JOONDALUP DC WA info@dwer.wa.gov.au
Clean fill	means material that will have no harmful effects on the environment and which consists of rock or soil arising from the excavation of undisturbed material. For material not from a clean excavation, it must be validated to have contaminants below relevant ecological investigation levels (as defined in the document Assessment Levels for Soil, Sediment and Water, Department of Environment, 2003);
CS Act	Contaminated Sites Act 2003 (WA)
Delegated Officer	an officer under section 20 of the EP Act
Department	means the department established under section 35 of the <i>Public Sector Management Act 1994</i> and designated as responsible for the administration of Part V, Division 3 of the EP Act.
DWER	Department of Water and Environmental Regulation
EPA	Environmental Protection Authority
EP Act	Environmental Protection Act 1986 (WA)
EP Regulations	Environmental Protection Regulations 1987 (WA)

Term	Definition
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
Inert waste Type 1 and Type 2	means waste as defined in the document titled 'Landfill Waste Classification and Waste Definitions' 1996 (As amended December 2009)
Landfill	means a site used for disposal of solid material (i.e. is spadeable) by burial in the ground that is licensed as a landfill under the Environmental Protection Act 1986 and as defined in the document Landfill Waste Classification and Waste Definitions' 1996 (As amended December 2009)
Landfill Waste Classification and Waste Definitions 1996 (as amended 2018)	refers to the document published by the Department of Water and Environmental Regulation in April 2018
Licence Holder	Big Bell Gold Operations Pty Ltd
m³	cubic metres
Minister	the Minister responsible for the EP Act and associated regulations
MS	Ministerial Statement
mtpa	million tonnes per annum
Noise Regulations	Environmental Protection (Noise) Regulations 1997 (WA)
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 Amendment Report applies, as specified at the front of this Amendment Report.
Putrescible waste	means the organic component of the waste stream which can be decomposed by microbial action and become putrid and likely to cause obnoxious odours and attract (scavenging) birds or animals; putrescible waste includes food wastes or wastes of animal or vegetable origin.
Revised Licence	the amended Licence issued under Part V, Division 3 of the EP Act, with changes that correspond to the assessment outlined in this Amendment Report.
Risk Event	as described in Guidance Statement: Risk Assessment
TSF	means Tailings Storage Facility
UDR	Environmental Protection (Unauthorised Discharges) Regulations 2004 (WA)

### 2. Amendment Description

The following guidance statements have informed the assessment and decision outlined in this Amendment Report.

- Guidance Statement: Regulatory Principles (July 2015)
- Guidance Statement: Setting Conditions (October 2015)
- Guidance Statement: Decision Making (April 2019)
- Guidance Statement: Risk Assessment (February 2017)
- Guidance Statement: Environmental Siting (November 2016)
- Guideline: Decision Making. Department of Water and Environment Regulation, Perth, June 2019

#### 2.1. Purpose and scope of assessment

An application for a transfer of Silver Lake Resources Limited Licence L8644/2012/1 to Big Bell Gold Operations Pty Ltd was received on the 1 September 2017. Full ownership of the Silver Lake Resources Murchison Goldfield Project transferred to Big Bell Gold Operations Pty Ltd occurred on 30 June 2017.

A Licence amendment application from Big Bell Gold Operations Pty Ltd was received on 27 April 2018 to include the Jaffa's Folly and Caustons pits as additional dewatering discharge locations at the Premises. An Amendment Notice 1 was granted 17 October 2018 to include the additional dewatering discharge locations.

A Licence amendment application from Big Bell Gold Operations Pty Ltd was received on 23 July 2019 to include a category 89 Class II putrescible landfill at the Premises. The Licence Holder applied on 5 August 2019 to amend the application to a category 64 instead of a category 89. This application is the purpose for the current amendment to the Licence.

#### **Class II Putrescible Landfill**

The existing landfill at the Premises currently accepts inert waste for burial. Approximately 252 tonnes of inert waste is accepted each year and therefore this facility is not currently regulated through the Licence as it falls under the minimum of 500 tonnes per year when a licence is required. All putrescible wastes generated at the Premises are currently segregated and then sent to the Shire of Cue landfill facility for burial.

The Licence Holder now proposes to construct a Class II putrescible landfill (Landfill) at the Premises as part of the current inert landfill area. The Licence Holder generates approximately 25 tonnes per year of putrescible waste at the Premises. As this amount exceeds the minimum throughput of 20 tonnes per year when a Prescribed Premises category 64 is required in accordance with Schedule 1 Of the EP Regulations, the construction and operation of the Landfill will require approval through the Licence.

The Landfill will be operated to only accept putrescible and inert waste types 1 and 2 for burial. The Landfill will be constructed in a designated, sign posted area using constructed trenches for the burial of wastes. The Landfill will be fenced with stock proof fencing to prevent fauna access.

Each trench will be 30 m in length, 3 m wide and 4 m deep. Earthen windrows will be constructed around three sides of each trench to prevent stormwater ingress. A roll over bund will be constructed at the entrance to the facility to prevent stormwater ingress.

The Licence Holder will also utilise separately constructed trenches for the burial of the inert wastes generated at the Premises.

#### **DWER** initiated assessment

DWER advised the Licence Holder on 5 September 2019 that an assessment of the Tailings Storage Facility 2 (TSF2), in particular seepage from the facility, would also be undertaken as part of this Licence amendment process.

As a requirement of the Licence, quarterly sampling of groundwater monitoring bores located at the TSF2 must be undertaken by the Licence Holder, with the results presented to DWER each year in the Annual Environmental Report (AER). In addition to the annual reporting requirements, the Licence Holder must also notify DWER within a specified time when there has been a breach of a limit set in the Licence. Limits have been applied for sampling parameters Sulphate and Total Dissolved Solids (TDS) for the groundwater monitoring bores located at the TSF.

The Licence Holder has notified DWER since 18 March 2018 that for each consecutive quarter there has been an exceedance of the Licence limit for Sulphate at monitoring bore TBS3 (see figure 1 below). The Licence Holder has also notified DWER since 14 January 2019 that there has been for each consecutive quarter an exceedance of the Licence limit for TDS at monitoring bore TBS3 (see figure 2 below). Additionally, historical records presented to DWER in previous AER's, indicate there has been an increasing trend for Sulphate and TDS concentrations in monitoring bore TBS3 since 2014.

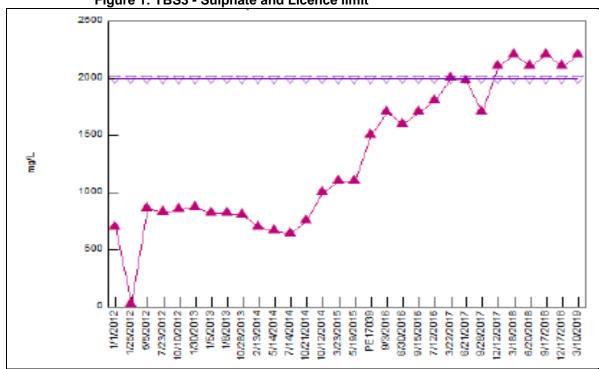


Figure 1: TBS3 - Sulphate and Licence limit

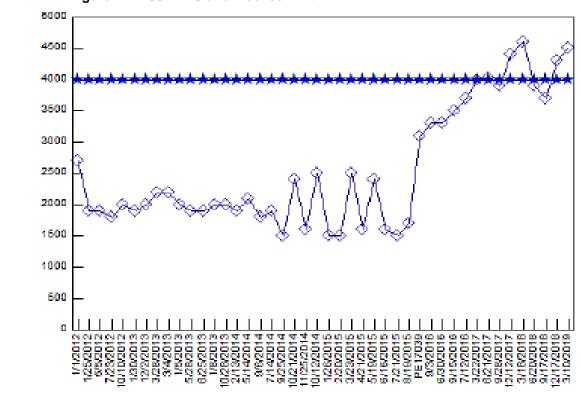


Figure 2: TBS3 - TDS and Licence limit

In response to these notifications, DWER requested the Licence Holder undertake an investigation into the cause for the exceedance of the Licence limit for Sulphate and TDS in groundwater monitoring bore TBS3. The Licence Holder submitted to DWER on 20 May 2019 an investigation on water chemistry at the Tuckabianna TSF2 monitoring bore TBS3.

A summary of the investigation is provided below:

- Deposition of tailings into the TSF2 ceased in October 2018 when the approved freeboard of 500 mm was reached with no further capacity available. Tailings material has been deposited into the Julies Reward in-pit since that time.
- Licence limit exceedance for Sulphate and TDS has only occurred at groundwater monitoring bore TBS3.
- The condition of the surrounding vegetation at the TSF2 remains in a good to excellent condition.
- Analysist of water samples taken from the nearby (500 m away) abandoned Tuckabeena Well since 1966 indicate there has been no discernible change in water chemistry except for an increase in pH from 6.8 to 7.9, a decrease in nitrates and zinc and an increase in alkalinity. All parameters remain within ANZECC guidelines for livestock drinking water quality.
- No observable seepage has occurred at the TSF2 walls, and no Licence limit exceedances for TDS and Sulphate have occurred for the other TSF2 groundwater monitoring bores TBS4 or TBS5.
- The Licence Holder proposes the seepage is due to a bedrock fracture beneath the TSF2, and/or surface water flows through the TSF. A large volume of pooled water remains at the north-eastern corner of the TSF2 following rainfall and may be seeping through the TSF in a north-south direction towards TBS3.

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The Licence Holder proposes to cap the TSF2 following sufficient settling of the tailings material. A geotechnical review will be undertaken to determine if the deposited tailings material strength is sufficient to withstand the placement of capping materials. Prior to the commencement of this process, the Licence Holder proposes the following management actions:

- Quarterly groundwater sampling of monitoring bores located at the TSF2 will continue
  in accordance with the requirements of the Licence. The Licence Holder will also
  conduct monthly water sampling at groundwater monitoring bore TBS3 for parameters
  pH, TDS and conductivity.
- Commencement of quarterly photographic vegetation monitoring in the vicinity of TBS3 and at suitable analogue sites.
- Installation of a weather station at the Premises to determine whether there is a correlation between surface water flows and water chemistry at TSB3.
- Undertake a hydrological study to determine the feasibility and potential impacts of diverting water from the north of the TSF2 to the western creekline.

#### 2.2. Consolidation of Licence

As part of this amendment package DWER has also consolidated the licence by incorporating changes made under the following Amendment Notices:

• Amendment Notice 1, granted 17 October 2018 – to include the Jaffa's Folly and Caustons pits as additional dewatering discharge locations.

The obligations of the Licence Holder have not changed in consolidating the licence. DWER has not undertaken any additional risk assessment of the Premises related to the previous Amendment Notice.

In consolidating the Licence, the CEO has:

- updated the format and appearance of the Licence;
- revised Licence condition's numbers, and removed any redundant conditions and realigned condition numbers for numerical consistency; and
- corrected clerical mistakes and unintentional errors.

The previously issued Amendment Notice will remain on the DWER website for future reference and will act a record of DWER's decision making.

### 3. Other approvals

The Licence Holder has provided the following information relating to other approvals as outlined in Table 2.

**Table 2: Relevant approvals** 

Legislation	Number	Approval
Mining Act 1978	REG ID 34087	Murchison Operations Mining Proposal – Infrastructure Disturbance. Approves the construction of landfill.
Rights in Water and Irrigation Act 1914	GWL 176056(2)	Groundwater Licence for dewatering of pits, providing potable water and raw water for the processing plant.

### 4. Amendment history

Table 3 provides the amendment history for L8644/2012/1.

**Table 3: Licence amendments** 

Instrument	Issued	Amendment				
L8644/2012/1	18/10/2012	Licence amendment to add Category 5				
L8644/2012/1	14/3/2012	Licence amendment to remove monitoring bore.				
L8644/2012/1	21/5/2015	Licence amendment to include the Julies Reward in-pit TSF				
L8644/2012/1	5/5/2016	Licence amendment to remove mining tenements and relevant monitoring conditions on those tenements. Licence updated to version 2.9				
L8644/2012/1	16/11/2017	Transfer of Licence to Big Bell Gold Operations Pty Ltd				
L8644/2012/1	17/10/2018	Amendment Notice 1 to include the Jaffa's Folly and Caustons pits as additional dewatering discharge locations				
L8644/2012/1	11/12/2019	Amendment to include a category 64 Class II putrescible landfill, consolidation of the licence by incorporating changes made under Amendment Notice 1, and assessment of the seepage issues at the TSF2.				

### 5. Location and receptors

The Project is located approximately 650 kilometres (km) northeast of Perth within the Shire of Cue. The town of Cue is located approximately 25 km away. The shire is sparsely populated (having a population of 272) with most people living in Cue. The climate is semi-arid to arid, characterised by hot dry summers and cool winters.

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
There are no nearby sensitive premises. The closest premises is the Yarraquin Homestead which is approximately 12 km away	Not applicable.

Table 5 below lists the relevant environmental receptors in the vicinity of the Prescribed Premises which may be receptors relevant to the proposed amendment.

Table 5: Environmental receptors and distance from activity boundary

Environmental receptors	Distance from Prescribed Premises
Public Drinking Water Source Area – Cue Water Reserve	12 km away to the West. Groundwater flow is in a south to south easterly direction.

Lake Austin – ephemeral salt lake	22 km south of the landfill
Groundwater	The Premises is located on a greenstone belt, which forms the drainage divide between two drainage systems and terminates at Lake Austin which is located approximately 22 km away in a southerly direction.
	There is one minor drainage line at the Premises which terminates at the Jaffa's Folly pit and this results in low saline water being observed within the pit.
	Groundwater in this area ranges from fresh to saline with depths ranging from 30 to 100 metres from natural ground surface.
Flora	Most vegetation has been cleared at the Premises due to mining operations with only some small minor strands of remnant vegetation remaining.
	A flora and fauna survey was conducted at the Premises in 2012 which found there are no Threatened Ecological Communities, Priority Ecological Communities or Threatened or Priority flora.
	Low Mulga woodlands covers most of this area and is well represented throughout the region. Mulga depends both on groundwater and surface water however the groundwater in this area is typically too low (greater than 30 mbgl) to support vegetation.

#### 6. Risk assessment

Tables 6 and 7 below describe the Risk Events associated with the amendment consistent with the *Guidance Statement: Risk Assessments*. Both tables identify whether the emissions present a material risk to public health or the environment, requiring regulatory controls.

Table 6: Risk assessment for proposed amendments during construction

Risk Event	Risk Event			Consequence	Likelihood			Regulatory controls (refer to
Source/Activities	Potential emissions	Potential receptors, pathway and impact	Applicant controls	rating <sup>1</sup>	rating <sup>1</sup>	Risk <sup>1</sup>	Reasoning	conditions of the granted instrument)
Construction of Class II Putrescible landfill	Dust generated from earthworks and construction of infrastructure	Air/windborne pathway causing impacts to vegetation	No controls were proposed by the applicant.  The applicant considers any generated dust is unlikely to have an impact on vegetation due to the natural dust tolerance of vegetation located in a semi-arid environment.	Slight	Possible	Low	No receptors in close proximity.	No additional regulatory controls are required to mitigate this risk.
	Noise generated from earthworks and construction of infrastructure	Impacts to the health and amenity of residents at the Yarraquin Homestead	Proposes compliance with the Environmental Protection (Noise) Regulations 1997	Slight	Rare	Low	The distance of 12 km is considered too great to impact offsite receptors.	No additional regulatory controls are required to mitigate this risk. The provisions of the Environmental Protection (Noise) Regulations 1997 are applicable.

Note 1: Consequence ratings, likelihood ratings and risk descriptions are detailed in the Department's Guidance Statement: Risk Assessments (February 2017)

Table 7: Risk assessment for proposed amendments during operation

Risk Event								
Source/Activities*	Potential emissions	Potential receptors, pathway and impact	Applicant controls	Consequence rating <sup>1</sup>	Likelihood rating <sup>1</sup>	Risk <sup>1</sup>	Reasoning	Regulatory controls (refer to conditions of the granted instrument)
Operation of Class II Putrescible landfill	Dust generated from exposed stockpiles and vehicle movement	Air/windborne dust deposition on vegetation which may prevent photosynthesis and respiration.	No controls identified by applicant.	Slight	Possible	Low	Receptors not in close proximity.  The existing landfill is located within a highly disturbed area with minimal vegetation remaining.  Only minor vehicle activities expected at the landfill.	No additional regulatory controls are required to mitigate this risk.
Operation of Class II Putrescible landfill	Odour generated by the decay of putrescible wastes	Impacts to the health and amenity of residents at the Yarraquin Homestead.	Waste will be covered with clean fill at least monthly.  Only small quantity of approximately 25 tpa of putrescible waste will be buried at the landfill.	Slight	Rare	Low	The distance of 12 km is considered too great to impact offsite receptors.	No additional regulatory controls are required to mitigate this risk. Any potential odour emissions can be regulated by section 49 of the EP Act.
Operation of Class II Putrescible landfill	Leachate generated from the putrescible wastes	Impacts to groundwater from seepage of leachate through the soil profile.	Earthen bunding around the perimeter of each trench to prevent the ingress of stormwater.	Slight	Rare	Low	The depth to groundwater at the Premises is greater than 30 metres and is therefore not considered a receptor.	No additional regulatory controls are required to mitigate this risk

Risk Event								
Source/Activities*	Potential emissions	Potential receptors, pathway and impact	Applicant controls	Consequence rating <sup>1</sup>	Likelihood rating <sup>1</sup>	Risk <sup>1</sup>	Reasoning	Regulatory controls (refer to conditions of the granted instrument)
Operation of Class II Putrescible landfill	Contaminated stormwater	Discharge of contaminated stormwater outside of the landfill area impacting surrounding soils and surface water due to sheet flow across the land surface.	Containment of contaminated stormwater within each trench through the use of earthen bunding around the perimeter, and excavation below ground level.	Slight	Rare	Low	Closest surface water system is located approximately 1 km away.  Contaminated stormwater will be retained within the trench through the use of earthen bunding.  The use of earthen bunding around each trench will reduce the ingress of stormwater.	Condition 4 of the Licence is amended to include specifications for the operation of the landfill. This includes maintaining the earthen bunding around the landfill trenches, and all putrescible waste is disposed into the purpose built trenches.  Condition 14 of the Licence is included as a new condition for the installation of earthen bunding on 3 sides of each trench and a roll over bund at each trench.
Operation of Class II Putrescible landfill	Windblown waste	Lose of amenity and nuisance impacts on residents at the Yarraquin Homestead caused by air/wind dispersion of waste.	Waste will be covered with clean fill at least monthly. Windblown waste will be recovered at least monthly. Trench method of disposal will be used.	Slight	Possible	Low	Only small quantities (25 tpa) of putrescible waste is expected to be accepted for burial each year. A majority of the waste accepted is inert material.  The distance of 12 km is considered too great to cause impacts on the amenity of offsite receptors.	Condition 4 of the Licence is amended to include specifications for the operation of the Class II landfill. This includes covering putrescible waste with clean fill at least monthly, and collecting windblown waste on a monthly basis.

Risk Event								
Source/Activities*	Potential emissions	Potential receptors, pathway and impact	Applicant controls	Consequence rating <sup>1</sup>	Likelihood rating <sup>1</sup>	Risk <sup>1</sup>	Reasoning	Regulatory controls (refer to conditions of the granted instrument)
Storage of tailings material in an uncapped disused TSF2	Seepage of tailings from the TSF2	Seepage of tailings material through the soil impacting groundwater which is considered suitable for stock watering purposes.  Increasing groundwater levels due to seepage can cause impacts on the health and survival of vegetation inundated with rising groundwater levels due to waterlogging and from increased salts in the soils.	Ceased discharging tailings material into the TSF2 in October 2018.  Provided investigation report regarding the water chemistry at the TSF2 monitoring bore TBS3 (May 2019).  The Licence Holder proposes to cap the TSF2 following a geotechnical review to determine if the deposited tailings material strength is sufficient to withstand the placement of capping materials.  Proposes to undertake a hydrological study to determine the feasibility and potential impacts	Mid-level onsite impacts. Low level offsite impacts local scale.	Possible The risk event could occur at some time.	Medium	Deposition of tailings into the TSF2 ceased in October 2018.  The water table remains approximately 12.5 m below the surface with no impacts to vegetation observed. The condition of the surrounding vegetation at the TSF2 remains in a good to excellent condition.  Sampling results for TDS and Sulphate at groundwater monitoring bore TBS3 have remained relatively stable for the past 18 months.  No downstream impacts have been observed at an abandoned stock watering well located 500	Conditions 1 and 2. The TSF2 has been removed as an authorised emission discharge point in the Licence.  Conditions 12, 21 and 24. The requirement for ambient groundwater monitoring at the TSF2, and the reporting of results, will remain as requirements of the Licence. These requirements will remain until capping of the TSF2 has occurred, and ambient monitoring results indicate seepage at the TSF2 has stabilized and the risks to the environment have reduced.  Condition 12, Table 10. This is a new condition in the Licence which requires the Licence Holder undertakes routine vegetation monitoring at locations downstream of the TSF2, and one location upstream as an analogue site. These locations were identified by the Licence Holder as part of the recommendations made in the report 'Investigation on Water Chemistry at Tuckabianna TSF2 Bore TBS3'.

Risk Event	isk Event							
Source/Activities*	Potential emissions	Potential receptors, pathway and impact	Applicant controls	Consequence rating <sup>1</sup>	Likelihood rating <sup>1</sup>	Risk <sup>1</sup>	Reasoning	Regulatory controls (refer to conditions of the granted instrument)
			from diverting water from the north of the TSF2 to the western creekline.				m away.  No seepage has occurred in the TSF2 walls.  The Licence Holder proposes to cap the TSF2 following a geotechnical review to determine if the deposited tailings material strength is sufficient to withstand the placement of capping materials.	

Note 1: Consequence ratings, likelihood ratings and risk descriptions are detailed in the Department's Guidance Statement: Risk Assessments (February 2017)

#### 7. Consultation

**Table 8: Summary of consultation** 

Method	Comments received	DWER response
Applicant referred	Licence Holder replied 9/12/2019 and	Licence amendment prepared for
draft documents on	wished to waiver the comment period	signing.
29 November 2019	and issue the amended Licence.	

### 8. Conclusion

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

#### 8.1. Summary of amendments

Table 9 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 9: Licence amendments** 

Condition No.	Proposed amendments	
Not applicable	Premises named changed from Big Bell Gold Operations Murchison Goldfield Project to Cue Gold Operations – Tuckabianna Project. Owner has remained the same.	
Not applicable	Inclusion of new mining tenements M20/111, M20/176, M20/183 and M20/247 to the Premises details on first page of Licence.	
Not applicable	Inclusion of new Category 64 (Class II landfill) into the Prescribed premises category description on the first page of the Licence.	
Previous conditions 1.1.3, 1.1.4 and 4.1.2	Removed as redundant conditions.	
1.2.1	Removed as a redundant condition. The provisions of the <i>Environmental Protection Act 1986</i> apply for the prevention of pollution or environmental harm.	
Conditions 1 and 2 (previous condition1.3.2)	Removed TSF2 as containment infrastructure for receiving of tailings materials. Licence Holder advised tailings are no longer discharged into the TSF2 and proposes to cap the TSF2 following a geotechnical review.	
Condition 1	New condition to include the disposal of putrescible and inert wastes.	
Condition 4	Amended to include site infrastructure and operational requirements for the new landfill.	
Condition 11 (previous condition 3.3.1)	Amended to remove TSf2 process monitoring requirements.	

Condition 12 (previous condition 3.4.1)	Amended to include vegetation monitoring requirements.	
Conditions 14, 15, 16 and 17	New conditions for the construction of the Class II landfill trenches and fencing, including certification and notification requirements.	
Schedule 1: Maps. Premises Map	Premises map updated to include additional mining tenements.	
Schedule 1: Maps. Class II Landfill	New map to identify the location of the new Class II landfill.	
Schedule 1: Maps. Vegetation monitoring locations	New map to identify vegetation monitoring locations.	
Schedule 2	Amended by removing reporting and notification forms and replaced with Prescribed Premises Categories table.	
Schedule 3	New location for reporting and notification forms.	

Table 10 provides a summary of the changes that occurred where the licence is reformatted into the current licence template.

Table 10: Licence conversion map for new licence format

Existing licence condition	Condition Summary	Revised licence condition	Conversion notes
1.3.1	Pipeline operational requirements	Condition 4, Table 5	Reformatting of condition into table format
1.3.2	Containment infrastructure for waste materials	Condition 4, Table 5	Reformatting of condition into table format. TSF2 removed from this table. See notes above in Table 10.
1.3.3	Inspection requirements for infrastructure at the Premises.	Condition 5	Original format retained. Minor updates to numbering.
1.3.4	Production and design limits	Condition 3	Reformatting and minor updates to wording.
2.1.1	Recording and investigating exceedance of a limit	Condition 24	Notification requirements cover recording and investigation of Licence limit exceedances.
2.2.1	Emission points to groundwater	Condition 2	Reformatting and minor updates to wording. Condition carried over from Amendment Notice 1.
3.1.1, 3.1.2, 3.1.3 and 3.1.4	General monitoring requirements	Conditions 6, 7, 8 and 9	Conditions carried over in original format.

3.2.1	Monitoring of emissions to groundwater	Condition 10	Condition carried over from Amendment Notice 1.
3.3.1	Process monitoring	Condition 11	Condition carried over in original format. TSF2 removed as a monitoring point as this facility is no longer used as a tailings disposal area.
3.4.1	Monitoring of ambient groundwater quality at the TSF2 and Julies Reward in-pit TSF. Also includes new condition table for ambient vegetation monitoring.	Condition 12	Reformatting and minor updates to wording and numbering. Table 10 included as an additional monitoring requirement for the assessment of ambient vegetation quality.
4.1.1	Licence Holder information and record keeping requirements.	Conditions 18 and 19	Reformatting and minor updates to wording and numbering.
4.1.3	The requirement for the submission of an Annual Audit Compliance Report.	Condition 23	Reformatting and minor updates to wording.
4.1.4	The requirement for the recording of complaints and actions taken in response to the complaint.	Condition 20	Reformatting and minor updates to wording.
4.2.1	The requirement to submit an AER each annual period and the information required in the AER.	Condition 21	Reformatting and minor updates to wording and numbering. Also includes the requirement to report on the new vegetation monitoring condition required in condition 12.
4.2.2	Additional reporting information to be provided in the AER.	Condition 22	Conditions carried over in original format.
4.3.1	Notification requirements	Condition 24	Reformatting and minor updates to numbering.

#### Alana Kidd

Manager, Resource Industries INDUSTRY REGULATION An officer delegated by the CEO under section 20 of the EP Act

## **Appendix 1: Key documents**

	Document title	In text ref	Availability
1	Licence L8644/2012/1 – Big Bell Gold Operations Murchison Goldfield Project	Licence	accessed at www.dwer.wa.gov.au
2	Licence Amendment Notice 1, 17 October 2018	-	
3	Big Bell Gold Operations Pty Ltd, Cue Gold Operations, Investigation on Water Chemistry at Tuckabianna TSF2 Bore TBS3, May 2019	Investigation on Water Chemistry at Tuckabianna TSF2 Bore TBS3	DWER record A1790233
4	Application form and supporting documentation, 23 July 2019	Application	DWER record A1807966
5	Email: Application for Licence Amendment – Change of category number, dated5 August 2019	-	DWER record A1811953
6	DWER, July 2015. Guidance Statement: Regulatory principles. Department of Environment Regulation, Perth.	-	accessed at www.dwer.wa.gov.au
7	DWER, October 2015. Guidance Statement: Setting conditions. Department of Environment Regulation, Perth.	-	
8	DWER, August 2016. Guidance Statement: Licence duration. Department of Environment Regulation, Perth.	-	
9	DWER, November 2016. Guidance Statement: Risk Assessments. Department of Environment Regulation, Perth.	-	
10	DWER, November 2016. Guidance Statement: Decision Making. Department of Environment Regulation, Perth.	-	
11	DWER, June 2019. Guideline: Decision Making. Department of Water and Environment Regulation, Perth	-	

#### **Appendix 2: Summary of Licence Holder comments**

The Licence Holder was provided with the draft Amendment Report and amended Licence on 29 November 2019 for review and comment. The Licence Holder responded on 9 December 2019 waiving the remaining comment period until 2 January 2020. No comments were submitted on the draft Amendment Report or amended Licence.