



Application for Licence Amendment

Part V Division 3 of the *Environmental Protection Act 1986*

Licence Number	L8579/2011/2
Licence Holder	AngloGold Ashanti Australia Limited
ACN	008737424
File Number	2012/006902-1
Premises	Sunrise Dam Gold Mine Legal description – Mining tenements M39/1116 and L38/176 LAVERTON WA As defined by the Premises maps attached to the Revised Licence
Date of Report	12 May 2023
Decision	Revised licence granted

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

Table of Contents

1. Decision summary	1
2. Scope of assessment	1
2.1 Regulatory framework	1
2.2 Amendment summary	1
2.3 Exclusions	2
2.4 Consolidation of Licence	2
3. Risk assessment	3
3.1 Source-pathways and receptors	3
3.1.1 Emissions and controls	3
3.1.2 Receptors	4
3.2 Risk ratings	2
4. Consultation	5
5. Conclusion	5
5.1 Summary of amendments	5
References	9
Appendix 1: Application validation summary	10
Table 1: Proposed throughput capacity changes	2
Table 2: Licences consolidated in this amendment	2
Table 3: Licence Holder controls	4
Table 4: Sensitive human and environmental receptors and distance from prescribed activity	5
Table 5. Risk assessment of potential emissions and discharges from the Premises operation	3
Table 6: Consultation	5
Table 7: Summary of licence amendments and consolidation of licence conditions in this amendment	5
Figure 1: Distance to sensitive receptors	1

1. Decision summary

Licence L8579/2011/2 is held by AngloGold Ashanti Australia Limited (Licence Holder) for the Sunrise Dam Gold Mine (the Premises), located at Mining tenements M39/1116 and L38/176 in Laverton WA.

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 L8579/2011/2 has been granted.

The Revised Licence issued as a result of this amendment consolidates and supersedes the existing Licence and Amendment Notices previously granted in relation to the Premises. The Revised Licence has been granted in a new format with existing conditions being transferred, but not reassessed, to the new format.

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 30 January 2023, the Licence Holder submitted an application to the department to amend Licence L8579/2011/2 under section 59 and 59B of the *Environmental Protection Act 1986* (EP Act). The following amendments are being sought:

- Consolidation of the licence and three amendment notices into a single document;
- Removal of reference to a tailings discharge rate (4.5Mtpa) as this is inconsistent with the approved production capacity for Category 5 of 5.5Mtpa. On a dry weight basis the volume of ore processed is equal to the volume of ore deposited into the CTD TSF as tailings;
- Removal of references to gas generator installation/construction activities, as these items have been installed/constructed and determined by DWER to be complied with;
- Remove TSF1 groundwater monitoring requirements, as the facility was decommissioned in 2000 and rehabilitated in 2013 so there is no longer an emission source;
- Update details for replacement monitoring bores installed as part of Stage 10 expansion;
- Remove reference to an incorrect generator model;
- Remove requirement for generator emission monitoring and related reporting requirements, as the distance to receptors means there is no practical pathway for emissions to cause impacts, and the monitoring data is not used for any other purpose;
- Updated wording to clarify that Inert Waste Type 2 refers to both tyres and rubber to better reflect activities that occur at the premises;
- Increased annual throughput of the landfill (Category 64) from 5,000 tpa to 10,000 tpa and expand the area for landfilling to include all of the top surface of the Cleo Waste Rock Dump; and

- Update figures.

This amendment is limited only to changes to Category 64 activities from the existing Licence, with all other changes being administrative in nature. No changes to the aspects of the existing Licence relating to Category 5 or 52 have been requested by the Licence Holder.

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

Table 1: Proposed throughput capacity changes

Category	Current throughput capacity	Proposed throughput capacity	Description of proposed amendment
64	5,000 tpa	10,000 tpa	Increase in annual throughput and expansion of the area for landfilling to include all of the top surface of the Cleo Waste Rock Dump

2.3 Exclusions

The Licence Holder has requested the removal of the containment infrastructure specification for the CTD TSF on the grounds that it is a construction requirement which has been completed. The purpose of this condition is to specify where materials on site may be deposited to, and similar requirements are specified for other storage vessels within this condition, so the delegated officer considers this requirement will remain.

2.4 Consolidation of Licence

As part of this amendment package the department has consolidated the licence by incorporating changes made under the Amendment Notices as summarised in Table 2.

Table 2: Licences consolidated in this amendment

Instrument	Issued	Summary of approval
L8579/2011/2	27/02/2017	Licence granted
L8579/2011/2	12/09/2017	Amendment Notice 1 to authorise Stage 11 perimeter embankment raise to the CTD TSF (Centrally Thickened Discharge Tailings Storage Facility)
L8579/2011/2	13/09/2018	Amendment Notice 2 to authorise construction and operation of a new sewage evaporation pond
L8579/2011/2	24/10/2018	Amendment Notice 3 to authorise an increase in ore processing capacity under Category 5 from 4.5 Mtpa to 5.5 Mtpa

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

In consolidating the licence, the CEO has:

- updated the format and appearance of the Licence;
- deleted the redundant AACR form set out in schedule 1 of the previous licence and advise the Licence Holder to obtain the form from the department's website;

- 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 full consolidation of licence conditions as they relate to this Revised Licence are detailed in Section 5.1. Previously issued Amendment Notices will remain on the department's website for future reference and will act as a record of the department's decision making.

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 premises operation which have been considered in this Amendment Report are detailed in Table 3 below. This also details the proposed control measures the Licence Holder has proposed to assist in controlling these emissions, where necessary.

Table 3: Licence Holder controls

Emission	Sources	Potential pathways	Proposed controls
Dust	Increase in landfill throughput and expansion of landfill to the surface of Cleo Waste Rock Dump	Air / wind dispersion causing deposition off-site	Trenches are excavated below the ground surface of the Cleo Waste Rock Dump and include a windrow to provide an additional buffer. Regular burial of waste will occur (fortnightly)
Windblown waste		Air / wind dispersion causing deposition off-site	Trenches are excavated below the ground surface of the Cleo Waste Rock Dump and include a windrow to provide an additional buffer. Regular burial of waste will occur (fortnightly)
Potentially acid forming (PAF) material / soil		Seepage of stormwater through waste rock dump to soil and groundwater	Any PAF waste rock disposal cells are not located on the outer surface of the Cleo Waste Rock Dump, and so there is no risk that landfill trenches will be constructed within PAF cells
Leachates		Infiltration through the soil profile to groundwater causing degradation to the beneficial use of groundwater	The landfill is located up to 50-60 m high so there is limited interaction with groundwater. Groundwater in the area is hypersaline. Current licence conditions specify minimum groundwater separation distance of 3 meters.
Surface water run-off/contaminated stormwater		Overland runoff causing erosion and ecosystem disturbance. Infiltration through soil profile to groundwater, causing ecosystem disturbance and the degradation to the beneficial use of groundwater	Trenches are excavated below the ground surface of the Cleo Waste Rock Dump and include a windrow
Vermin/Pests		Direct contact	Location of the landfill at the top of the Cleo Waste Rock Dump there is limited ability for feral animals to access the landfill.

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 4 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 4: Sensitive human and environmental receptors and distance from prescribed activity

Human receptors	Distance from prescribed activity
Red October Gold Mine	5km south of the premises boundary
Granny Smith Gold Mine	10 km north of the premises boundary
Lake Carey, Upsilon, Jubilee Southwest, Wati Kutjara and Sunrise Island and other Aboriginal Sites and Heritage Place(s)	Inside premises and extending approximately 10km north of the premises
Wilga Hill Scatter 1 and Wilga Road Scatter 1 Heritage Place(s)	3.5 km and 6.2 km east of the premises
Environmental receptors	Distance from prescribed activity
<i>Leipoa ocellata</i> – Priority fauna (Malleefowl), class: vulnerable	Single opportunistic sighting within the premises in 2007.
<i>Falco peregrinus</i> – Priority fauna (Peregrine falcon), specially protected	Two opportunistic sighting within and in proximity (400 m) of the premises in 2004.

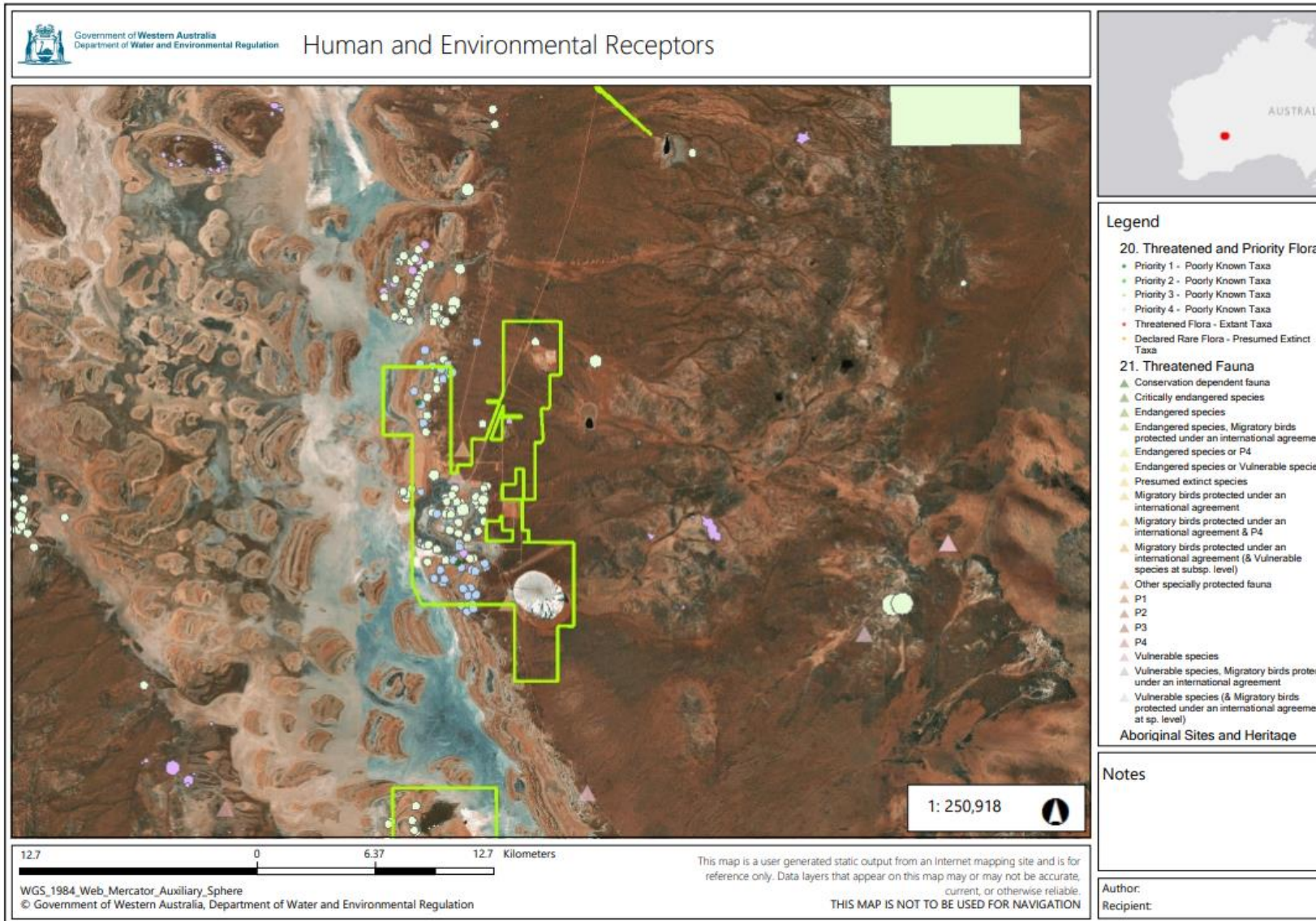


Figure 1: Distance to sensitive receptors

Licence L8579/2011/2

IR-T15 Amendment report template v3.0 (May 2021)

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 5.

The Revised Licence L8579/2011/1 that accompanies this Amendment Report authorises emissions associated with the operation of the Premises i.e. category 5, 54 and 62 activities.

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

Table 5. Risk assessment of potential emissions and discharges from the Premises operation

Risk Event					Risk rating ¹ C = consequence L = likelihood	Licence Holder's controls sufficient?	Conditions ² of licence	Justification for additional regulatory controls
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Licence Holder's controls				
Operation								
Increase in landfill throughput and expansion of landfill to the surface of Cleo Waste Rock Dump	Dust	Air / wind dispersion causing deposition off-site	Lake Carey and other Heritage places to west of premises, Red October and Granny Smith Gold Mine	Refer to Section 5.1	C = <i>Slight</i> L = <i>Unlikely</i> Low Risk	Y	<i>Existing Condition 3</i>	<i>N/A</i>
	Windblown waste	Air / wind dispersion causing deposition off-site	Lake Carey and other Heritage places to west of premises, Red October and Granny Smith Gold Mine	Refer to Section 5.1	C = <i>Slight</i> L = <i>Unlikely</i> Low Risk	Y	<i>Existing Conditions 3 and 4</i>	<i>N/A</i>
	Potentially acid forming (PAF) material / soil	Seepage of stormwater through waste rock dump to soil	Reduced quality or contamination of soil	Refer to Section 5.1	C = <i>Slight</i> L = <i>Unlikely</i> Low Risk	Y	<i>Existing Condition 2</i>	<i>N/A</i>
	Surface water run-off/contaminated stormwater	Overland runoff causing erosion and ecosystem	Lake Carey and other Heritage places to	Refer to Section 5.1	C = <i>Slight</i> L = <i>Unlikely</i> Low Risk	Y	<i>Existing Condition 1, 5, 6, 7</i>	<i>N/A</i>

Risk Event					Risk rating ¹ C = consequence L = likelihood	Licence Holder's controls sufficient?	Conditions ² of licence	Justification for additional regulatory controls
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Licence Holder's controls				
		disturbance.	west of premises, Red October and Granny Smith Gold Mine					

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. depicts additional regulatory controls imposed by department.

4. Consultation

Table 6 provides a summary of the consultation undertaken by the department.

Table 6: Consultation

Consultation method	Comments received	Department response
Local Government Authority advised of proposal (03/03/2023)	No comments received	N/A
Licence Holder was provided with draft amendment (09/05/2023)	<ol style="list-style-type: none"> 1. Update registered business address; 2. Update Premises details; and 3. Removal of notification related to conditions that have been removed 	Noted and actioned.

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 7 provides a summary of the proposed amendments and consolidation of licence conditions in this amendment 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 7: Summary of licence amendments and consolidation of licence conditions in this amendment

Existing condition	Condition summary	Revised licence condition	Amendment/Conversion notes
N/A	Expiry Date	Updated to 20/07/2029	In accordance with the Notice of Amendment of Licence Expiry Dates (29/04/2016)
N/A	Assessed production/design capacity	Assessed production/design capacity	Categories 5, 54 and 64 updated in line with amendment notices
N/A	Licence History	Licence History	Updated to include amendment notices and this amendment
N/A	Throughout document	Throughout document	Reference to Licensee changed to Licence Holder
1.1.1 1.1.2	Interpretation and definitions	N/A Interpretation section, Definitions and Table 1	Redundant condition. Revised to current licensing format.
1.1.3	Australian or other standard	N/A	Redundant condition. Revised to current licensing format.

Existing condition	Condition summary	Revised licence condition	Amendment/Conversion notes
		Interpretation section, Definitions and Table 1	
1.1.4	Reference to code of practice	N/A Interpretation section, Definitions and Table 1	Redundant condition. Revised to current licensing format.
1.2.1	General Emissions	Condition 1	
1.3.1	Management of waste	Condition 2	Sewage throughput increased to 250 m3 as per Amendment Notice 1 Limitation on tailings deposition removed Inert waste type 2 described as tyres and rubber to clarify activities occurring at the premises.
1.3.2	Cover material	Condition 3	
1.3.3	Windblown waste	Condition 4	
1.3.4	Hazardous Material Pipeline maintenance	Condition 5	
1.3.5	Saline dewatering effluent discharge requirements	Condition 6	
1.3.6	Tailings, decant water and effluent containment infrastructure	Condition 7	The TSF lining requirement remains in place to specify where tailings must be deposited.
1.3.7	Minimum freeboard	Condition 8	Wording updated in accordance with Amendment Notice 1
1.3.8	TSF management	Condition 9	
1.3.9	Inspection of infrastructure	Condition 10	
1.3.10	Works specification	Condition 11	Works relating to 3 gas generators and the Stage 11 CTD TSF have been determined as compliant (A2159893;A1869900) and have been removed. Wording changes to refer to figures within the licence instead of Amendment notice
2.1.1	General emissions	N/A	Condition removed as there are no limits specified within the licence. Inspection and reporting requirements conditions adequately cover this requirement.
2.2.1	Emission points to air	Condition 12	Reference to diesel engine type updated
2.3.1	Emission points to surface water	Condition 13	

Existing condition	Condition summary	Revised licence condition	Amendment/Conversion notes
3.1.1	Water sampling requirements	Condition 14	
3.1.2	Monitoring frequency specifications	Condition 15	
3.1.3	Monitoring equipment calibrated to manufacturer specifications	Condition 16	
3.1.4	Report calibration discrepancies	Condition 17	
3.2.3	Monitoring of point source emissions to air	N/A	Conditions removed as the distance to receptors means there is no practical pathway for emissions to cause impacts, and the monitoring data is not used for any other purpose.
3.2.4	Air sampling locations		
3.2.5	NATA accreditation for air sampling		
3.3.1	Monitoring of point source emissions	Condition 18	
3.4.1	Process monitoring	Condition 19	
3.5.1	Ambient groundwater quality monitoring	Condition 20	Wording updated in accordance with Amendment Notice 1 and removal of TSF monitoring as the facility has not been in use for many years.
3.5.2	Annual dewatering discharge report	Condition 21	
3.5.3	Annual assessment of vegetation near CTD TSF	Condition 22	
4.1.1	Information and records to be legible	Condition 23	
4.1.2	Annual Audit Compliance Report	Condition 24	
4.1.3	Complaints record system	Condition 25	
4.2.1	Annual Environmental Report	Condition 26	
4.2.2	Annual Environmental Report	Condition 27	
4.2.3	Submission of Compliance Documentation	Condition 28	References to power station and TSF have been removed as these are constructed, reference to sewage evaporation pond remains.
4.2.4	Compliance document specifications	Condition 29	

Existing condition	Condition summary	Revised licence condition	Amendment/Conversion notes
4.2.5	Commissioning report for gas generators	N/A	Conditions removed as reports have been submitted and assessed as compliant.
4.2.6	Commissioning report specifications	N/A	Conditions removed as reports have been submitted and assessed as compliant.
4.3.1	Notification requirements	Condition 30	Removal of commissioning notification as this has been completed.
Schedule 1 Maps	Maps	Maps	Updated maps included.

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.

Appendix 1: Application validation summary

SECTION 1: APPLICATION SUMMARY				
Application type				
Amendment to licence	<input checked="" type="checkbox"/>	Current licence number:	L8579/2011/2	
		Relevant works approval number:		N/A
Date application received		30 January 2023		
Applicant and Premises details				
Applicant name/s (full legal name/s)		AngloGold Ashanti Australia Limited		
Premises name		Sunrise Dam Gold Mine		
Premises location		Mining Lease M39/1116 (expiry 18/7/2038), and Miscellaneous Licence L38/176 (expiry 20/7/2032)		
Local Government Authority		Shire of Laverton		
Application documents				
HPCM file reference number:		DWERDT718602 DER2012/006902-1		
Key application documents (additional to application form):		Authorisation to Act as Representative of the Occupier – Norman Galli Supporting documentation		
Scope of application/assessment				
Summary of proposed activities or changes to existing operations.		<p>Licence amendment</p> <p>As an administrative adjustment, consolidate the licence and three amendment notices into a single document:</p> <ul style="list-style-type: none"> - L8579/2011/2 issued in 27 Feb 2017 - Amendment Notice 1 issued 12 Sept 2017 - Amendment Notice 2 issued 13 Sept 2018 - Amendment Notice 3 issued 24 Oct 2018. <p>Category 64 – Increase in capacity of the Sunrise Dam Gold Mine (SDGM) landfill from 5,000 t/year to 10,000 t/year and expand the area for landfilling to include all the top surface of the Cleo Waste Rock Dump</p>		

Category number/s (activities that cause the premises to become prescribed premises)

Table 1: Prescribed premises categories

Prescribed premises category and description	Assessed production or design capacity	Proposed changes to the production or design capacity (amendments only)
Category 5 – Processing and beneficiation of metallic or non-metallic ore	4,500,000 tonnes per year	Amendment notice 3 authorises 5,500,000 tonnes per year
Category 6 – Mine dewatering	5,000,000 tonnes per year	
Category 52 – Electrical power generation	48 MW	
Category 54 – Sewage facility	190m ³ per day	Amendment notice 2 authorises 250 m ³ per day
Category 57 - Used tyre storage	1,000 tyres	
Category 64 – Class II putrescible landfill site	5,000 tonnes per year	10,000 tonnes per year

Legislative context and other approvals

Has the applicant referred, or do they intend to refer, their proposal to the EPA under Part IV of the EP Act as a significant proposal?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Referral decision No: Managed under Part V <input checked="" type="checkbox"/> Assessed under Part IV <input type="checkbox"/>
Does the applicant hold any existing Part IV Ministerial Statements relevant to the application?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Ministerial statement No: EPA Report No:
Has the proposal been referred and/or assessed under the EPBC Act?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Reference No:
Has the applicant demonstrated occupancy (proof of occupier status)?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Certificate of title <input type="checkbox"/> General lease <input type="checkbox"/> Expiry: Mining lease / tenement <input checked="" type="checkbox"/> Expiry: 18/7/2038 Other evidence <input checked="" type="checkbox"/> Expiry: Misc licence expiry 20/7/2032
Has the applicant obtained all relevant planning approvals?	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>	Approval: Expiry date: If N/A explain why? Premises is

		part of a mining tenement
Has the applicant applied for, or have an existing EP Act clearing permit in relation to this proposal?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	CPS No: N/A No clearing is proposed.
Has the applicant applied for, or have an existing CAWS Act clearing licence in relation to this proposal?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Application reference No: N/A Licence/permit No: N/A No clearing is proposed.
Has the applicant applied for, or have an existing RIWI Act licence or permit in relation to this proposal?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Application reference No: Licence/permit No: Licence / permit not required.
Does the proposal involve a discharge of waste into a designated area (as defined in section 57 of the EP Act)?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Name: Goldfields Groundwater Area Type: Proclaimed Groundwater Area Has Regulatory Services (Water) been consulted? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Regional office: Goldfields
Is the Premises situated in a Public Drinking Water Source Area (PDWSA)?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Name: N/A Priority: P1 / P2 / P3 / N/A Are the proposed activities/landuse compatible with the PDWSA (refer to <u>WQPN 25</u>)? Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
Is the Premises subject to any other Acts or subsidiary regulations (e.g. <i>Dangerous Goods Safety Act 2004, Environmental Protection (Controlled Waste) Regulations 2004, State Agreement Act xxxx</i>)	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	<ul style="list-style-type: none"> • <i>Environmental Protection (Controlled Waste) Regulations 2001</i> • <i>Environmental Protection (Noise) Regulations 1997</i> • <i>Environmental Protection Regulations 1987</i> • <i>Environmental Protection (Unauthorised Discharge) Regulations 2004</i> • <i>Mining Act 1978</i> • <i>Rights in Water and Irrigation Act 1914</i>

Is the Premises within an Environmental Protection Policy (EPP) Area?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Is the Premises subject to any EPP requirements?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Is the Premises a known or suspected contaminated site under the <i>Contaminated Sites Act 2003</i> ?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	<p>Classification: Possibly contaminated – investigation required (PC-IR)</p> <p>Date of classification: 28 May 2009</p>