



Application for Works Approval Amendment

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

Works Approval Number W6640/2022/1

Applicant Aurene MIT Pty Ltd

ACN 611 002 709

File number DER2021/000714~1

Premises Mt Ida Gold Project; Bottle Creek Premises
Mt Ida Road

Date of Report 19 July 2023

Decision Revised Works Approval Granted

A/MANAGER, RESOURCE INDUSTRIES

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

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1. Decision summary

Works Approval W6640/2022/1 is held by Aurenne MIT Pty Ltd (Works Approval Holder) for the Mt Ida Gold Project located at the Bottle Creek Premises.

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 construction and operation of the Premises. As a result of this assessment, Revised Works Approval W6640/2022/1 has been partially granted.

Compliance with the Industry Regulation Guide to Licensing cannot be met for the requested changes to conditions 9 and 11 and these changes have been refused.

The Revised Works Approval issued as a result of this amendment consolidates and supersedes the existing Works Approval previously granted in relation to the Premises. The Revised Works Approval 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 3 April 2023 the Works Approval Holder submitted an application to the department to amend Works Approval W6640/2022/1 under section 59 and 59B of the *Environmental Protection Act 1986* (EP Act). The following amendments are being sought:

Administrative amendments

- Change in stage 1 embankment relative level (RL) from 506 m to RL498 m RL;
- Change to TSF Pipeline and decant pipeline path;
- Decant causeway changed from west to east;
- Update to the design infrastructure maps (Figures 2 – 4); and
- Modification to wording for conditions 9 and 11 associated with compliance reporting.

Category 5 Amendment:

- Rock ring decant structure replaced with a segmented concrete decant tower with rock and geotextile.

This amendment is limited only to changes to Category 5 activities from the existing Works Approval, no changes to the aspects of the existing Works Approval relating to Category 7 and 64 have been requested by the Works Approval Holder.

2.2.1 Stage 1 embankment height

This amendment is to correct survey errors, will not alter the risk profile for the premises and is therefore administrative in nature. It was identified by the works approval holder that the starter embankment height for stage 1 should be 498 m RL instead of 506 m RL. This will see a maximum embankment height reduced to 10 m from 18 m. The reduction in embankment height will be safer at start up with less abutment material needed to provide lateral support.

2.2.2 Pipeline route

The new proposed pipeline () will be a straight line from the Bottle Creek processing plant to the eastern side of the IWL TSF. The new pipeline route is shorter and will result in less clearing and reduced pump pressure. The proposed pipeline has been approved by Clearing Permit 9383 and Mining Proposal Reg ID 101557.

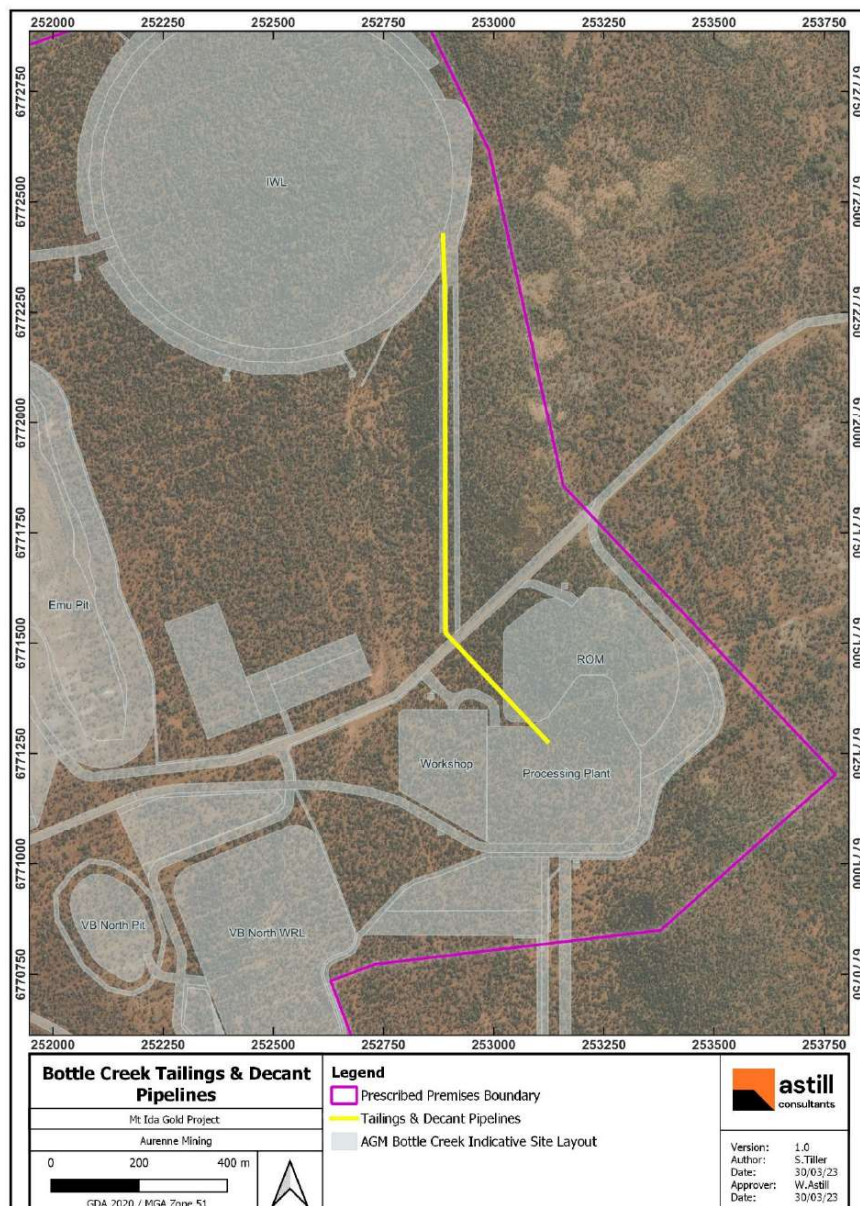


Figure 1 New proposed pipeline route

2.2.3 Decant structure

The Works Approval Holder proposes that the central rock ring decant should be changed to a concrete decant tower with rock and geotextile because it is more typical for a gold processing facility and is expected to enhance decant recovery by making it easier and safer to change out pumps and being more common will have greater understanding by operators, therefore, making compliance with condition 21 of W6640/2022/1 easier.

The concrete decant tower will enable the use of a submersible pump that can be raised and lowered on a winch out of the decant tower, making servicing and maintenance easier and safer.

Underdrainage system will remain unchanged and will feed the gravity system to the collection tower. Decant water will still be collected by a centrally located tower. The tower will be modified to a concrete decant tower with rock and geotextile that will use a submersible pump rather than a pontoon mounted pump.

The other change proposed is to place the decant causeway along the eastern side of the TSF. The water balance model and seepage estimate will not be changed by the proposed changes. CMW Geosciences Pty Ltd (CMW) (2023) considers that the risk rating according to ANCOLD (2019) remains unchanged with these amendments and the risk of overtopping and seepage remain the same.

2.2.4 Compliance conditions

The Works Approval Holder requests updating conditions 9 and 11 “to allow for minor changes to design and construction. Minor changes are non-material changes that do not affect design objectives (intent) or risk of implementation”.

Department response

This request will not be accepted. According to the department’s *Guideline: Industry Regulation Guide to Licensing* (2019) verification through an Environmental Compliance Report is not a test of the performance of the installed works or of any emissions. It is documented confirmation that what has been installed is authorised by the Works Approval. The purpose of the Critical Containment Infrastructure Report is for the Department to confirm that the environmental controls on containment infrastructure are properly constructed before materials are deposited in the containment cell. The Department considers it appropriate, on the basis of risk, to ensure that critical containment infrastructure meets its requirements prior to environmental commissioning, or any form of operation commencing. Works approvals and licences may be granted subject to conditions that are enforceable, meaning that conditions will be:

- worded in a clear and certain manner;
- clear and precise on the outcome that must be achieved or the measures that are required; and
- worded so that the requirements for compliance are clear (*Guidance Statement: Setting Conditions*, 2015).

Allowing changes that don’t constitute a ‘material change’ are ambiguous and hard to enforce. Therefore changes to design need to be assessed by the Department as non compliance in the Critical Containment Infrastructure Report, Environmental Compliance Report or via a Works

Approval Amendment.

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 construction and time limited operations which have been considered in this Amendment Report are detailed in Table 1 below.

Table 1 also details the proposed control measures the Works Approval Holder has proposed to assist in controlling these emissions, where necessary.

Table 1: Works Approval Holder controls

Emission	Sources	Potential pathways	Proposed controls
Dust	Construction of pipeline along alternative route	Air/windborne pathway	<p><u>Existing Condition 1</u> the Works Approval Holder must manage dust management by wetting down construction activities.</p> <p><u>Existing Condition 3</u> – the Works Approval holder must conduct a Malleefowl survey prior to construction.</p> <p><u>No additional conditions proposed</u></p>
Tailings and contaminated water	Modification to decant structure associated with storage of tailings in IWL TSF	Seepage through base and embankment	<p><u>Existing Condition 4</u> - Construction requirements for tailings storage facility starter embankment.</p> <p>The decant will still be collected by a centrally located tower, though this will now be a concrete decant tower with rock and geotextile that will use a submersible pump rather than a pontoon mounted pump. This new design is consistent with other hard rock gold mining operations.</p> <p><u>No additional conditions proposed</u></p>

Emission	Sources	Potential pathways	Proposed controls
Tailings and contaminated water	Pipeline operation alternative route	Pipeline leak/rupture and direct discharge to land	<u>Existing condition 4</u> – Construction requirements for Pipelines carrying tailings and decent return water. <u>No additional conditions proposed</u>

3.1.2 Receptors

In accordance with the *Guideline: Risk assessments* (DWER 2020), the Delegated Officer has excluded employees, visitors and contractors of the Works Approval 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.

Error! Reference source not found. 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)). The closest town is Menzies located ~100 km southeast of the Works Approval. Given the distance it will not be considered as part of the Risk assessment.

Table 2: Sensitive human and environmental receptors and distance from prescribed activity

Environmental receptors	Distance from activity / prescribed premises
<u>Groundwater</u> RIWI Goldfields Groundwater Area	<u>Groundwater depth:</u> 28.9 – 44.3 meters below ground surface (mbgs) within semi-confined to confined aquifers. <u>Groundwater quality:</u> Saline (10,000 to 30,000)
<u>Threatened ecological community (TEC):</u> <ul style="list-style-type: none"> Perrinvale/Walling vegetation complex - P1 	2.3 km west of prescribed premises boundary
<u>Threatened fauna</u> <ul style="list-style-type: none"> Long-tailed dunnart (<i>Sminthopsis longicaudata</i>) Malleefowl (<i>Leipoa ocellata</i>) 	~ 1.8 km west of prescribed premises boundary ~2.5 km west of the prescribed premises boundary. The Works Approval Holder notes that the site and 40 km surrounding it is considered potential Malleefowl habitat.
<u>Priority Flora</u> <ul style="list-style-type: none"> <i>Jacksonia lanicarpa</i> - P1 <i>Drosera eremaea</i> - P1 <i>Calotis sp. Perrinvale Station</i> P3 <i>Hemigenia exilis</i>, P4 <i>Lepidosperma lyonsii</i> P1 	Multiple Priority 1 <i>Jacksonia lanicarpa</i> populations are within the prescribed premises. <ul style="list-style-type: none"> Regulated under clearing permit CPS 9383 and Department of Biodiversity, Conservation and Attractions (DBCA) has been advised of the presence of a Priority flora". On-going impacts (i.e. dust/seepage) to remaining <i>Jacksonia</i> populations will be

	considered under this Part V assessment.
<p>Ephemeral creek lines</p> <ul style="list-style-type: none"> • Bottle Creek 	<p>Bottle Creek and a number of ephemeral creek lines intersect with the project area.</p> <p>The applicant states the project areas lies in the headwaters of Bottle Creek which eventually drains to Lake Ballard, a RAMSAR listed wetland.</p> <p>As Lake Ballard is ~20km south-east of the prescribed premises, the proposed activities are unlikely to have a negative impact on the lake.</p>

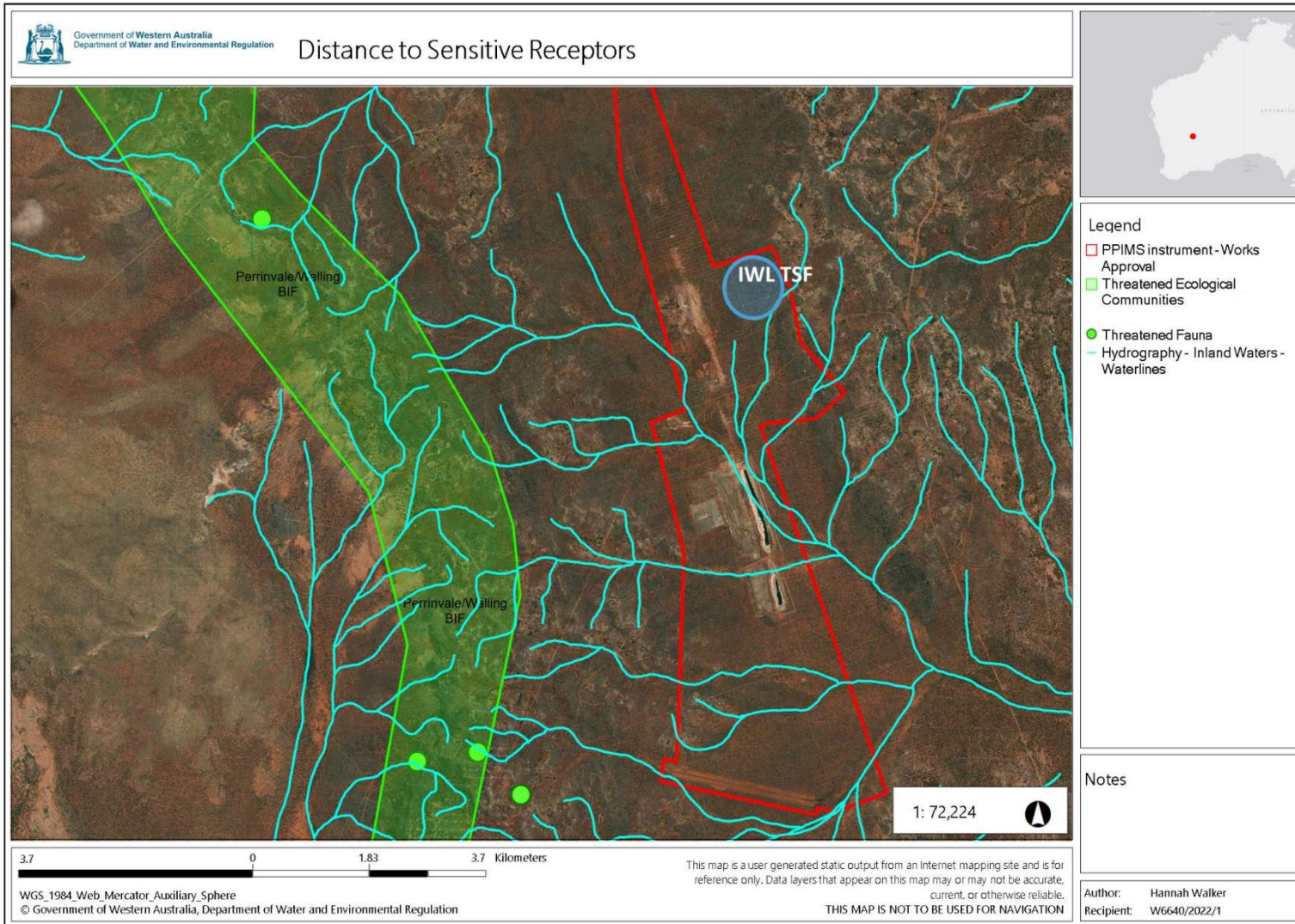


Figure 2: Distance to sensitive receptors

Works Approval W6640/2022/1

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 Works Approval 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 Works Approval Holder's proposed controls to be critical to maintaining an acceptable level of risk, these will be incorporated into the works approval as regulatory controls.

Additional regulatory controls may be imposed where the Works Approval Holder's controls are not deemed sufficient. Where this is the case the need for additional controls will be documented and justified in Table 3.

The Revised Works Approval W6640/2022/1 that accompanies this Amendment Report authorises construction and time-limited operations. The conditions in the Revised Works Approval have been determined in accordance with *Guidance Statement: Setting Conditions* (DER 2015).

A licence is required following the time-limited operational phase authorised under the works approval to authorise emissions associated with the operation of the Premises. A risk assessment for the operational phase has been included in this Amendment Report, however licence conditions will not be finalised until the department assesses the licence application.

Table 3. Risk assessment of potential emissions and discharges from the Premises during construction and operation

Risk Event								
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Works Approval Holder's controls	Risk rating ¹ C = consequence L = likelihood	Works Approval Holder's controls sufficient?	Conditions ² of works approval	Justification for additional regulatory controls
Construction								
Construction of pipeline along alternate route	Dust	Air/windborne pathway causing poor vegetation health/death for threatened flora and nearby threatened fauna	Priority flora within prescribed premises (<i>Jacksonia lanicarpa</i>) Adjacent native vegetation Nearby threatened fauna Malleefowl mounds during breeding season (1 September to 31 January)	Refer to Section 3.1	C = Minor L = Unlikely Medium Risk	Y	<u>Existing conditions</u> Conditions 1 and 2 – dust management; and Condition 3 – preconstruction Malleefowl survey	The Delegated Officer considers that the existing controls in the Works Approval are acceptable.
Time Limited Operations								
Modification to decant structure associated with storage of tailings in the IWL TSF	Tailings and contaminated water (metalloids, cyanide)	Seepage through base and embankments to soil and groundwater causing vegetation poor health/death	Priority flora within prescribed premises (<i>Jacksonia lanicarpa</i>) Adjacent native vegetation TEC	Refer to Section 3.1	C = Moderate L = Unlikely Medium Risk	Y	<u>Existing conditions</u> Condition 4 – construction requirements updated to reflect current requirements;	This alteration is unlikely to alter the expected volume of seepage from the TSF and consequently the risk profile will remain unchanged. The Delegated Officer

Risk Event								
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Works Approval Holder's controls	Risk rating ¹ C = consequence L = likelihood	Works Approval Holder's controls sufficient?	Conditions ² of works approval	Justification for additional regulatory controls
		and groundwater contamination	(perrinvale/walling vegetation complex) Nearby threatened fauna (reliant on vegetation) Nearby ephemeral creek lines				Condition 6 – groundwater monitoring well installation requirements; Condition 25 – groundwater monitoring and standing water level limits during Time Limited Operations; Condition 26 – 27 – groundwater monitoring limit exceedances; Condition 29 – monitoring of water balance; and Condition 30 – baseline assessment of vegetation health by remote sensing	considers that the existing controls in the Works Approval are acceptable and no additional controls are required. Condition 4 construction specifications have been revised..

Risk Event								
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Works Approval Holder's controls	Risk rating ¹ C = consequence L = likelihood	Works Approval Holder's controls sufficient?	Conditions ² of works approval	Justification for additional regulatory controls
	Tailings and contaminated water (metalloids, cyanide)	Pipeline leak/rupture and direct discharge to land causing vegetation poor health/death	Priority flora within prescribed premises (<i>Jacksonia lanicarpa</i>) Adjacent native vegetation Nearby threatened fauna (reliant on vegetation) Nearby ephemeral creek lines	Refer to Section 3.1	C = Moderate L = Possible Medium Risk	Y	Condition 4 – construction requirements	The Delegated Officer considers that the existing controls in the Works Approval are acceptable.

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

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

4. Consultation

Table 4 provides a summary of the consultation undertaken by the department.

Table 4: Consultation

Consultation method	Comments received	Department response
Department of Mines, Industry Regulation and Safety (DMIRS) advised of proposal 5/05/2023	Response received 3/07/2023 confirming proposed alterations are consistent with current approvals under Reg ID 101557. Confirmed that new pipeline route is authorised under clearing permit 9383 and noting Malleefowl considerations for the premises. Application for additional tenure is currently under assessment by DMIRS.	Confirmed and noted
Works Approval Holder provided draft documents for comment on 7/7/2023	Clarification requests responded to and request to waive the 21 consultation period sent on 12/7/2023.	N/A

5. Conclusion

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

5.1 Summary of amendments

Table 5 provides a summary of the proposed amendments and will act as record of implemented changes. All proposed changes have been incorporated into the Revised Works Approval as part of the amendment process.

Table 5: Summary of works approval amendments

Condition no.	Proposed amendments
4	Table 1 has been updated with the following construction requirements. <ul style="list-style-type: none"> Change height of starter embankment to 10 m crest height and 498m RL; Central rock ring decant changed to concrete decant tower with rock and geotextile; and Pipeline route updated
Figures in Schedule 1	Updated to show current Works approval conditions

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. Department of Water and Environmental Regulation (DWER) 2019, *Guideline: Industry Regulation Guide to Licensing*, Perth, Western Australia.
5. Astill Consultants, (2023) *W6640/2022/1 Works Approval Amendment Supporting Document*, Western Australia.
6. CMW Geoscience (2023), *IWL TSF Construction Mt Ida Gold*, Wembley, Western Australia.

Appendix 1: Application validation summary

SECTION 1: APPLICATION SUMMARY						
Application type						
Works approval	<input type="checkbox"/>					
Licence	<input type="checkbox"/>	Relevant works approval number:		None	<input type="checkbox"/>	
		Has the works approval been complied with?			Yes	<input type="checkbox"/>
		Has time limited operations under the works approval demonstrated acceptable operations?			Yes	<input type="checkbox"/>
		Environmental Compliance Report / Critical Containment Infrastructure Report submitted?			Yes	<input type="checkbox"/>
		Date Report received:				
Renewal	<input type="checkbox"/>	Current licence number:				
Amendment to works approval	<input checked="" type="checkbox"/>	Current works approval number:	W6640/2022/1			
Amendment to licence	<input type="checkbox"/>	Current licence number:				
		Relevant works approval number:		N/A	<input type="checkbox"/>	
Registration	<input type="checkbox"/>	Current works approval number:		None	<input type="checkbox"/>	
Date application received		3 April 2023				
Applicant and Premises details						
Applicant name/s (full legal name/s)		Aurenne MIT Pty Ltd				
Premises name		Mt Ida Gold Project – Bottle Creek				
Premises location		No change, but include whole or parts of M29/150, M29/151, G29/29, G29/30, L29/145, L29/154, L29/137, E29/1007, E29/1014.				
Local Government Authority		Shire of Menzies				
Application documents						
HPCM file reference number:		DER2021/000714~1				
Key application documents (additional		Application supporting document				

to application form):	Appendix 1 – Design Addendum
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Scope of application/assessment

Summary of proposed activities or changes to existing operations.	<p><u>Works approval amendment</u></p> <p>Category 5 amendments</p> <ul style="list-style-type: none"> • Change in Stage 1 embankment from RL506m to RL498m due to a survey error; • Rock ring decant structure replaced with a segmented concrete decant tower with rock and geotextile; • Change to TSF Pipeline and Decant Pipeline path. Supporting document has indicated “tailings pipeline straight from mill when a 3rd parties objection to crossing a tenement was removed) Will need to request a copy of the agreement and clarification around this (as the whole area falls within their premises boundary – do they not have full tenements rights for this section of the premises?) • Decant causeway from east not west. • Updates to figures 2 – 4 (TSF design infrastructure) <p>Other amendments</p> <ul style="list-style-type: none"> • Modification to wording for conditions 9 and 11 associated with compliance reporting. <p>No changes to throughput or other categories proposed.</p>
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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 or beneficiation of metallic or non-metallic ore	1.4 million tonnes per annual period	No changes to throughput proposed
Category 7: Vat or insitu leaching of metal: premises on which metal is extracted from ore with a chemical solution	1.4 million tonnes per annual period	No changes to throughput proposed
Category 64: Class II or III putrescible landfill	360 m3 per annual period	No changes to throughput proposed

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	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Referral decision No: Managed under Part V <input type="checkbox"/>
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significant proposal?		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"/> Multiple mining lease provided as part of original works approval application: record number A2073108 Other evidence <input type="checkbox"/> Expiry:
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? Exempt under the <i>Mining Act 1978</i>
Has the applicant applied for, or have an existing EP Act clearing permit in relation to this proposal?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	CPS No: CPS 9383
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
Has the applicant applied for, or have an existing RIWI Act licence or permit in relation to this proposal?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Application reference No: Licence/permit No: GWL204119
Does the proposal involve a discharge of waste into a designated area (as defined in section 57 of the EP Act)?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Name: Goldfields Groundwater Area Type: RIWI Act Has Regulatory Services (Water) been consulted? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Regional office: Goldfields

<p>Is the Premises situated in a Public Drinking Water Source Area (PDWSA)?</p>	<p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p>	<p>Name: N/A Priority: N/A Are the proposed activities/landuse compatible with the PDWSA (refer to WQPN 25)? Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/></p>
<p>Is the Premises subject to any other Acts or subsidiary regulations (e.g. <i>Dangerous Goods Safety Act 2004</i>, <i>Environmental Protection (Controlled Waste) Regulations 2004</i>, <i>State Agreement Act xxxx</i>)</p>	<p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>	
<p>Is the Premises within an Environmental Protection Policy (EPP) Area?</p>	<p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p>	
<p>Is the Premises subject to any EPP requirements?</p>	<p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p>	
<p>Is the Premises a known or suspected contaminated site under the <i>Contaminated Sites Act 2003</i>?</p>	<p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p>	<p>Classification: N/A Date of classification: N/A</p>