



## Application for Licence Amendment

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

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<b>Licence Number</b>	L9010/2016/1
<b>Licence Holder</b>	Mt Morgans (WA) Gold Mining PTY LTD
<b>ACN</b>	612 053 291
<b>File Number</b>	DER2016/002022-1~7
<b>Premises</b>	<p>Mt Morgans Gold Project</p> <p>Mining tenements M39/236, M39/395, M39/390, M39/272, M39/18, M39/228, M39/264, M39/304, M39/240, M39/248, L39/245, L39/246, M39/441, M39/250, M39/504, M39/745, M39/403, M39/282, M39/36 and M39/110</p> <p>LAVERTON WA 6440</p> <p>as depicted in Schedule 1 of the works approval</p>
<b>Date of Report</b>	21 December 2022
<b>Decision</b>	Revised licence granted

**A/MANAGER, RESOURCE INDUSTRIES  
REGULATORY SERVICES**

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

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## 1. Decision summary

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 Licence L9010/2016/1 has been granted.

## 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 Application summary and overview of the premises

Mt Morgans WA Mining Pty Ltd (applicant, Licence Holder) currently holds Licence L9010/2016/1 for categories 5, 6, 54, 57 and 64 under Part V of the *Environmental Protection Act 1986* (EP Act). This amendment is applicable to category 6 dewatering activities within the Jupiter Complex. The amendments are all within tenement M39/326.

The current dewatering pipelines existing on the premises have the following configurations:

- Westralia open pit to Sarah, Ramornie and Ramornie Open pits;
- Westralia open pit to King Street open pit;
- Ramornie open pit to Morgans North open pit and Craic open pit;
- Craic Open pit to Sarah open pit; and
- Jupiter complex open pits to the processing plant.

During Mt Morgans latest reporting period (February 2021-February 2022) dewatering and discharge have occurred in a manner inconsistent with L9010/2016/1. This includes mine water discharge of 140,000m<sup>3</sup> to the Heffernan and Ganymede open pits (also known as Jupiter Complex) from the Mt Marven open pit and 357,000m<sup>3</sup> mine water discharge from Double Jay open pit to Ganymede open pit (Mt Morgans, 2022). Mt Morgans seeks to amend category 6 activities approved under licence L9010/2016/1 to reflect the current dewatering practice associated with the Jupiter Complex. This includes:

- Ganymede and Heffernans (Jupiter Complex) open pits as an approved discharge point at a dewatering rate of 5 to 9 L/s; and
- Double Jay and Mt Marven open pit as source points. Pipelines have already been constructed.

Mine dewatering at the Jupiter Complex is operated through pit sumps that direct water to a central turkey's nest before discharge into Ganymede and Heffernan pits. The dewater will be used for dust suppression (via a standpipe at the turkey nest) and diversion to process water dams within the process mill.

Figure 1 below provides further detail on the proposed changes to the prescribed activities being undertaken at the premises including the source of dewater and the emission point (sink). Figure 2 demonstrates the Jupiter complex. No changes to the requirements of the existing licence relating to category 5, 54, 57 and 64 have been requested by the applicant. No amendment to category 6 throughput has been requested.

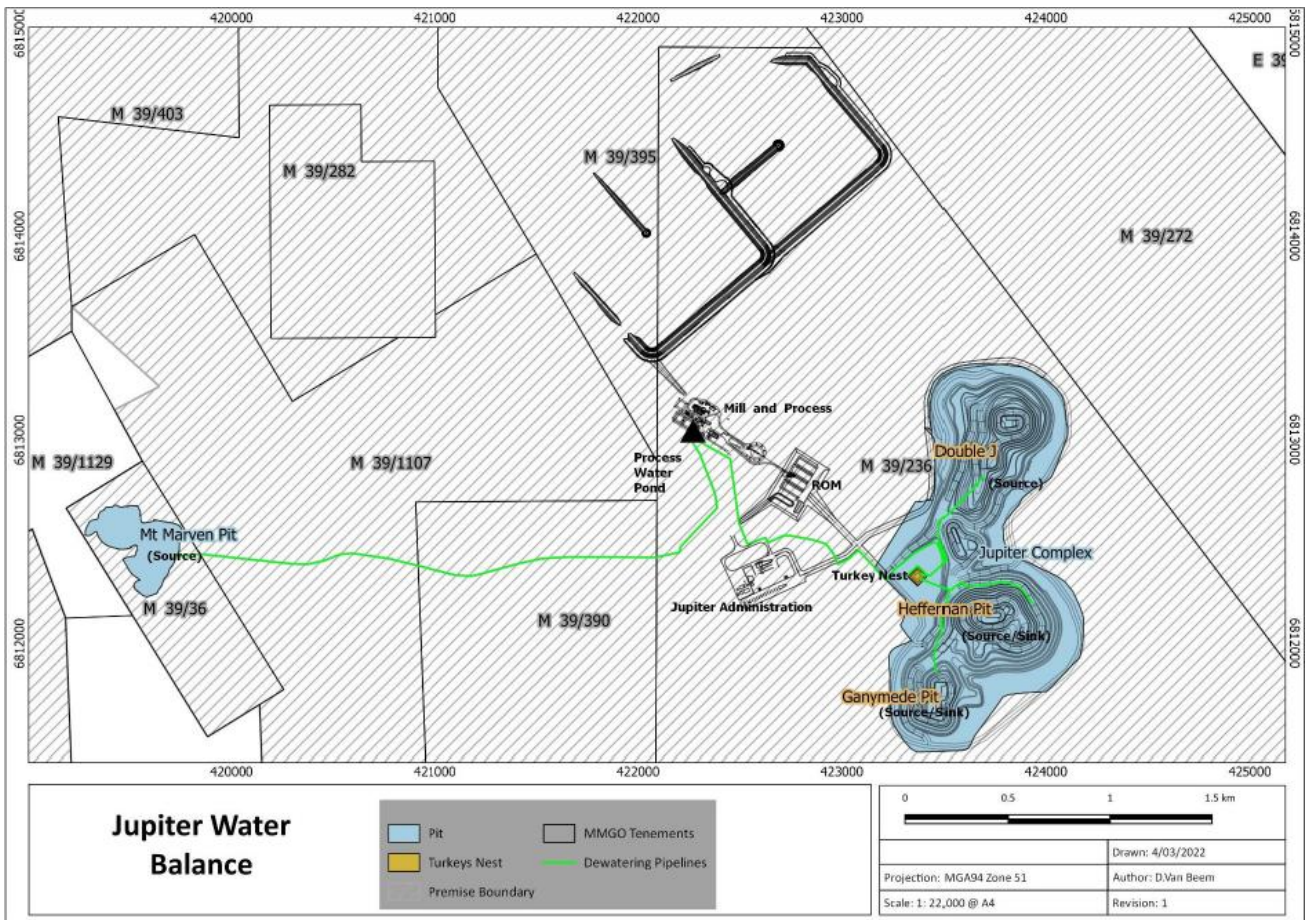
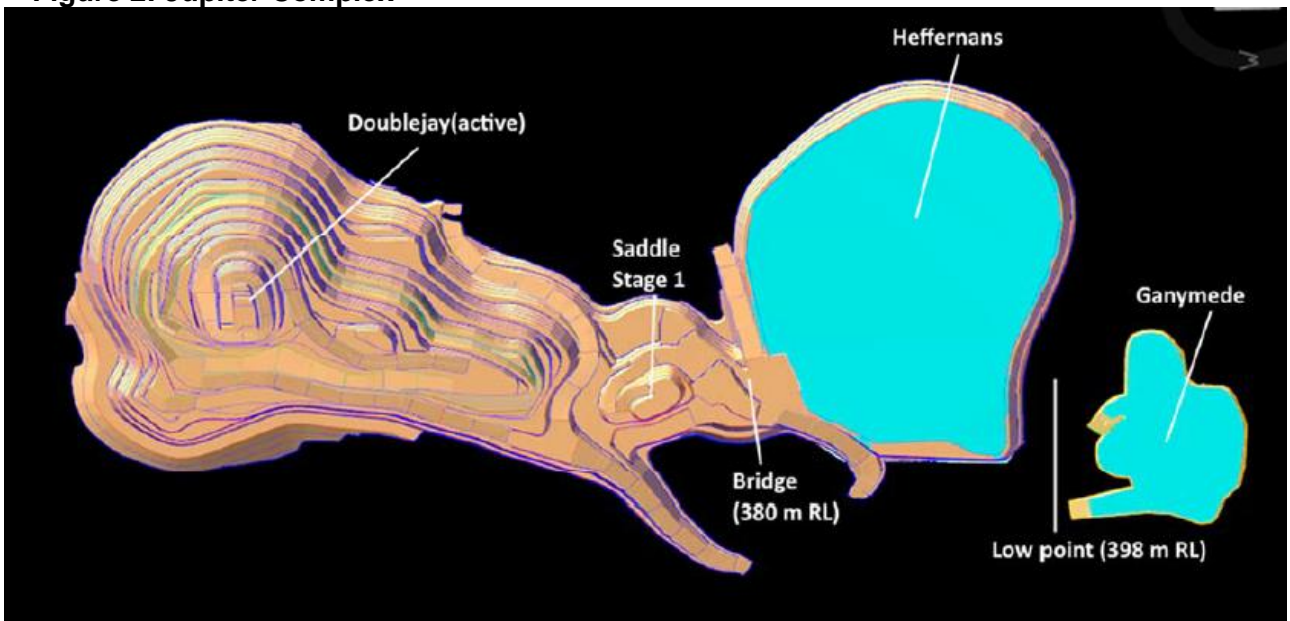


Figure 1: Layout of pipeline infrastructure between Mt Marven pit and the Juniper complex.

Figure 2: Juniper Complex



### 2.3 Mining Proposal

The Mining Proposal (Registration ID 60641) (MP 60641) seeking approval for the mining of the Juniper and Westralia gold deposits, with processing facilities and power supply located at Juniper including the construction of a pipeline between Juniper and Mt Marven to support mine

dewatering of the Jupiter complex (M39/390, M39/236 and M39/36) was approved by the Department of Mines, Industry Regulation and Safety (DMIRS) 28 January 2021.

### **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 2020a).

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 1: Licence Holder controls below. Table 1 also details the proposed control measures the Licence Holder has proposed to assist in controlling these emissions, where necessary.



**Table 1: Licence Holder controls**

Emission	Sources	Potential pathways	Proposed controls
<b>Operation</b>			
Hypersaline dewater	Leaks and spills from pipeline rupture	Direct discharge to land	<ul style="list-style-type: none"> <li>• All pipelines carrying hypersaline water have been banded and fitted with leak detection flow meters and shut/off isolation;</li> <li>• Pipeline pressure/flow leak detection monitoring have been installed that is interlocked with the pump, resulting in a shutdown of pumping if the flow drops below a certain level; and</li> <li>• Inspections of pipelines are being undertaken once in a 24-hour period for the duration of pumping.</li> <li>• Due to the close proximity of a number of Aboriginal heritage sites to the proposed operations at Jupiter, Dacian previously implemented a ground disturbance procedure to all heritage sites to ensure they were protected from disturbance during operation;</li> <li>• All operations are carried out in accordance with the provisions of the <i>Aboriginal Heritage Act 1972</i>;</li> <li>• An environmental and heritage induction and training program has been developed for the Mt Morgan Gold Project;</li> <li>• The 2013 investigation was conducted for the purpose of identifying any places or sites of ethnographic significance to the Aboriginal custodians (the Kurrku people) within the meaning of the <i>Aboriginal Heritage Act 1972 (Act)</i> within the Jupiter area; and</li> <li>• All infrastructure at Jupiter has been positioned to avoid the known locations of heritage sites.</li> </ul>

Emission	Sources	Potential pathways	Proposed controls
	Dewater from Mt Marven/Double Jay pit into Ganymede/Heffernan	Seepage through pit walls into groundwater	<p>Groundwater Resource Management (GRM) (GRM, 2022), employed by the Licence Holder developed a Pit Water balance model for Ganymede and Heffernan Open Pits (emission points) that considered the inflows and outflows predicting no groundwater seepage to occur from the pits. Therefore, no further controls have been proposed. See the detailed risk assessment in section 3.3 for further information; and</p> <p>Licence condition 3.5.1 outlines the frequency of groundwater monitoring as quarterly.</p>
		Direct discharge to land via overtopping of pits / overtopping of Jupiter turkey's nest	<ul style="list-style-type: none"> <li>• No proposed controls for overtopping of turkey's Nest</li> <li>• No proposed controls for overtopping of pits. Pit water balance model for Ganymede and Heffernan pits indicate they have sufficient capacity to store the expected volume of dewatering effluent.</li> <li>• Heffernan has a storage capacity of 2,000 ML at 380 m RL and Ganymede has a storage capacity 400 ML at 398 m RL with modelling suggesting a dewatering rate of 5 to 9 L/s</li> </ul>

### 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.

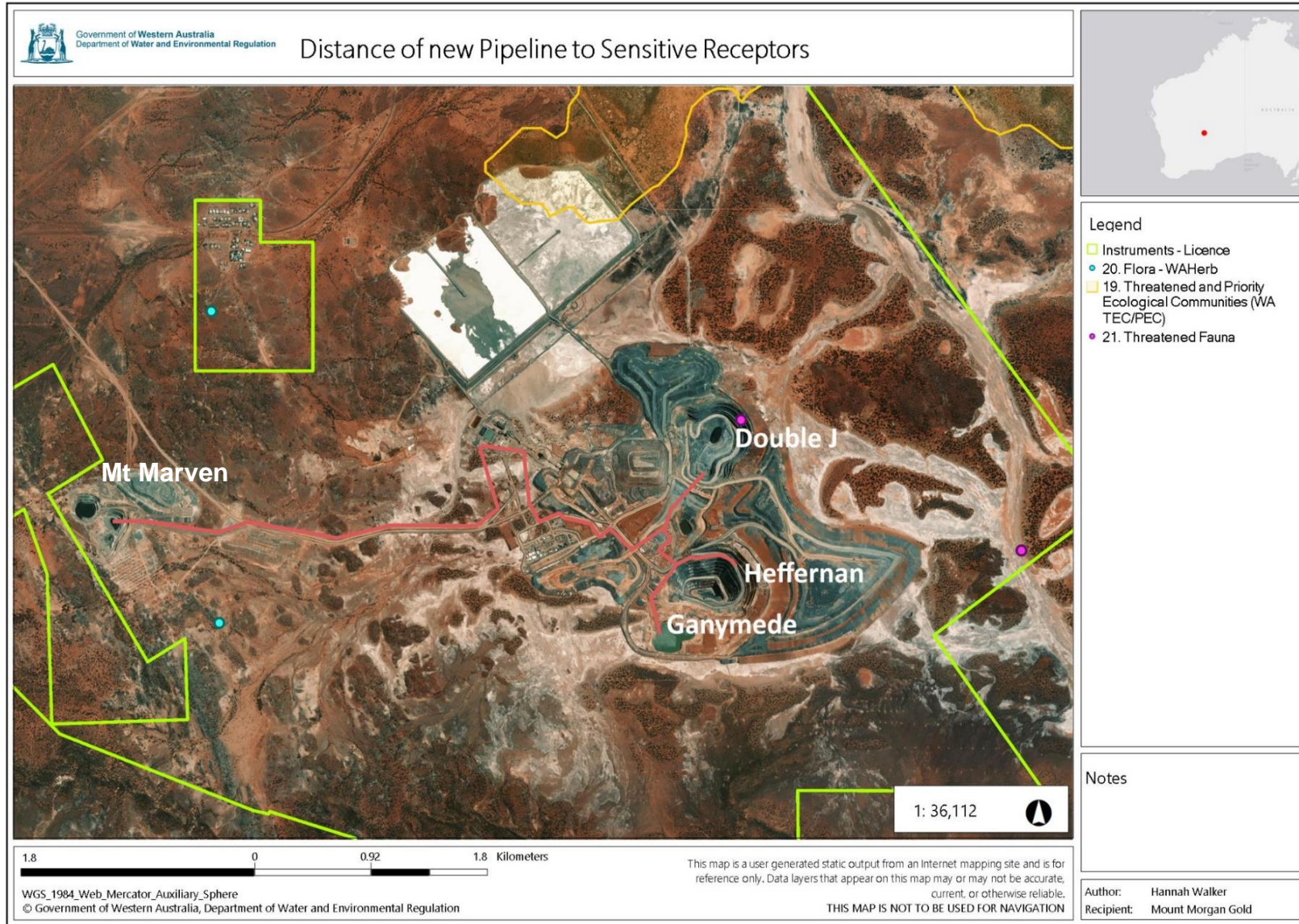
Table 2 below provides a summary of potential human and environmental receptors that may be impacted as a result of activities upon or emission and discharges from the prescribed premises (*Guideline: Environmental siting* (DWER 2020)).

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

Human receptors	Distance from prescribed activity
Aboriginal community: Mt Margaret	Approximately 1 km north of the pipeline with an estimated population of 100 people.
Aboriginal Heritage: Kurrku	<p>Mt Morgans has recorded 19 registered heritage sites within the Jupiter project area belonging to the Kurrku people. Five are intersected by the pipeline from the Mt Marven Pit to the Jupiter Complex.</p> <ul style="list-style-type: none"> <li>• 1146 – Ethnographic site 1.</li> <li>• 1721 – Garr-GU</li> <li>• 18933- Cave Painting</li> <li>• 881 – Montevideo Hill 2</li> <li>• 1726 – Wiltjitj</li> </ul>
Environmental receptors	Distance from prescribed activity
Lake Carey	<p>A playa connected the main Lake Carey playa is immediately adjacent to the Double Jay, Heffernan and Ganymede Pits with the main lake body approximately 1.7 km south.</p> <p>Jupiter complex is licensed to dewater to Lake Carey.</p>
Threatened Fauna	<p>The following species have been recorded within M39/236:</p> <ul style="list-style-type: none"> <li>• <i>Falco peregrinus</i> (specially protected) - Located within Double Jay Pit in 2012;</li> <li>• <i>Branchinella simplex</i> (vulnerable) – Located 1.8 km east from the Heffernan Pit in 2011; and</li> <li>• <i>Branchinella apophysate</i> (P1) – Located 1.5k km north of Mt Marven Pit in 1937</li> </ul> <p>Jupiter complex has a very low likelihood of supporting significant Stygofauna or Troglifauna communities due to low hydraulic conductivity and hypersaline groundwater.</p> <p>The Mt Morgans calcrete groundwater assemblage on Carey palaeodrainage and is identified as having a unique assemblage of invertebrates in the groundwater calcretes.</p>



	<p>Based on assessment of flora, terrestrial fauna, and subterranean fauna, completed by specialist consultants (Bennelongia Environmental Consultants Pty Ltd, 2016)), it is unlikely that the Project will have an impact on the conservation status of species and communities.</p>
Threatened and Priority Flora	<p>The following species have been located within the Prescribed Premises:</p> <ul style="list-style-type: none"> <li>• <i>Tecticornia cymbiformis</i> (P3) – Located 1.4 km north from the dewatering pipeline. Recorded in 1996; and</li> <li>• <i>Olearia mucronate</i> (P3) – Located 600 m south of dewatering pipeline. Recorded in 1931.</li> </ul> <p>The following are located outside the Premises boundary:</p> <ul style="list-style-type: none"> <li>• <i>Eremophila annosicaulis</i> located 500m north of premises in 1993; and</li> <li>• <i>Tecticornia</i> sp. <i>Lake Way</i> – located 300m South of the Premises in 2004.</li> </ul> <p>This risk assessment will focus on the priority flora as well as the surrounding riparian vegetation as a whole.</p>
Groundwater	<ul style="list-style-type: none"> <li>• Water abstracted from Jupiter pits has high salinity, between 180,000-260,000 mg/L TDS;</li> <li>• Natural low hydraulic gradient to the south;</li> <li>• Groundwater modelling shows that predicted pit lake water levels are to be below the pre-mining groundwater levels of 399 m RL; and</li> <li>• Dacian holds a current Groundwater Well Licence (GWL) for the project, GWL169901(5). The licence approves an annual abstraction of up to 1.4 GL (about 44 L/s). The tenements identified on the licence include those associated with Jupiter and Westralia.</li> </ul>
Groundwater: Threatened Ecological Community: Mt Morgan calcrete groundwater assemblage (P1)	<ul style="list-style-type: none"> <li>• Approximately covers 0.27km<sup>2</sup> in northern area of M39/236. Approximately 1.65km NNW of Double Jay pit.</li> <li>• The potential for dewater, due to discharge and seepage, is not expected to impact the calcrete aquifer due to the estimated seepage rates.</li> </ul>

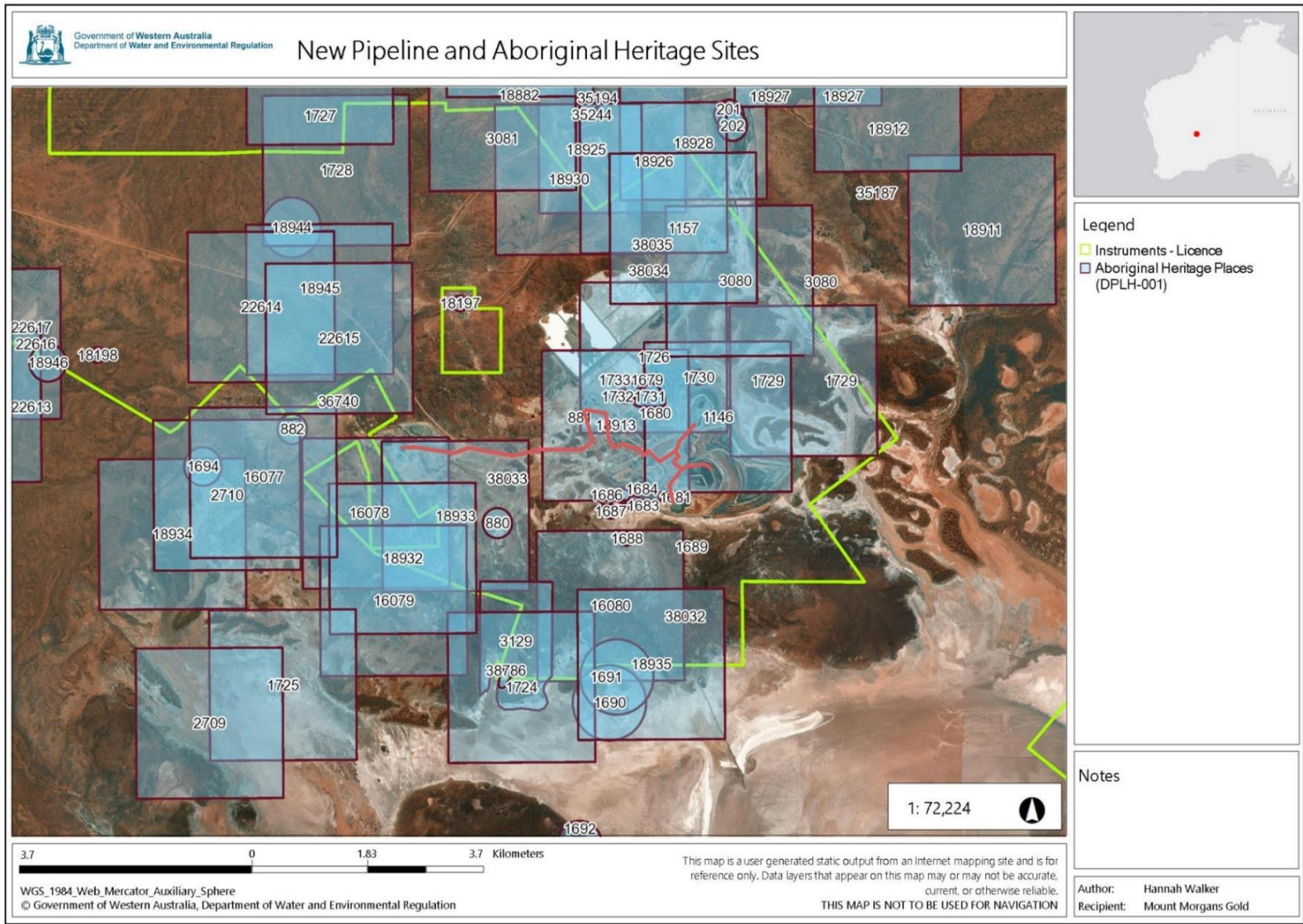


**Figure 3: Distance to sensitive receptors**

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**Figure 4: Location of Dewatering pipeline and recorded Aboriginal Heritage Sites.**

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## 3.2 Risk ratings

Risk ratings have been assessed in accordance with the *Guideline: Risk Assessments* (DWER 2020b) 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 3.

The Revised Licence L9010/2016/1 that accompanies this Amendment Report authorises emissions associated with the operation of the Premises i.e. Category 5, 6, 54, 57 and 64 activities.

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

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

Risk Event					Risk rating <sup>1</sup> C = consequence L = likelihood	Licence Holder's controls sufficient?	Conditions <sup>2</sup> of licence	Justification for additional regulatory controls
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Licence Holder's controls				
<b>Operation</b>								
Operation of new dewatering pipeline from Mt Marven pit to the Jupiter complex (Heffernan and Ganymede)	Saline Pit dewater	<p>Direct discharge into ground from pipeline leaks /spills causing:</p> <ul style="list-style-type: none"> <li>Contamination of Soils</li> <li>Death or degradation of vegetation</li> <li>Increased erosion</li> <li>Damage to aboriginal heritage sites</li> <li>Seepage into groundwater</li> </ul>	<ul style="list-style-type: none"> <li>Aboriginal heritage sites</li> <li>Surrounding vegetation</li> </ul>	Refer to 3.1	C = Minor L =Unlikely <b>Medium Risk</b>	Y	<ul style="list-style-type: none"> <li>Existing condition 1.2.1 – Requires either telemetry, automatic cutouts, or secondary containment of pipelines during operation</li> <li>Existing condition 1.2.2 – Requires 12 hourly inspections of pipelines, corrective action if environmental protection is not being maintained and keep a log of all inspections</li> </ul>	Existing conditions within the licence adequately manages this risk. No further regulatory controls are required.
		<p>Seepage through base and pit walls to groundwater causing impacts to:</p> <ul style="list-style-type: none"> <li>Groundwater quality and mounding of the groundwater table</li> <li>Impacts of vegetation at the surface</li> </ul>	<ul style="list-style-type: none"> <li>Groundwater</li> <li>Mt Morgans calcrete groundwater assemblage</li> <li>Native vegetation surrounding pits</li> <li>Surface water</li> </ul>	Refer to 3.1	C = Minor L = unlikely <b>Medium Risk</b>	N	<ul style="list-style-type: none"> <li>Updated condition 2.1.1 – Emission points to groundwater</li> <li><b><u>Existing condition 3.2.1, Table 3.2.1 - sets a limit of 5 meters below crest level for all pits.</u></b></li> </ul>	<p>Refer to section 3.3 for detailed risk assessment.</p> <ul style="list-style-type: none"> <li>Existing condition 3.2.1 has been updated to include the Jupiter complex open pits. This condition requires the receiving pits to have a limit freeboard of 5 meters below crest level. This has also been applied to the Jupiter Complex Open pits.</li> <li>The freeboard requirement will ensure that if mounding were to occur it would not</li> </ul>

Risk Event					Risk rating <sup>1</sup>	Licence Holder's controls sufficient?	Conditions <sup>2</sup> of licence	Justification for additional regulatory controls
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Licence Holder's controls	C = consequence L = likelihood			
								reach the root zones of native vegetation at the surface.
		Direct discharge to land from overtopping of receiving pits causing impacts to vegetation/ soil health and surface water quality.	<ul style="list-style-type: none"> <li>Surrounding vegetation</li> </ul>	Refer to 3.1	C= Minor L = Unlikely <b>Medium Risk</b>	N	<b><u>Existing condition 3.2.1, Table 3.2.1 - sets a limit of 5 meters below crest level for all pits.</u></b>	<p>A water balance study concluded that both the Ganymede and Heffernan pits have sufficient capacity to store more than 400 ML of surplus water from the operations without fear of overtopping.</p> <p>Existing condition 3.2.1 has been updated to include the Jupiter complex open pits. This condition requires the receiving pits to have a limit freeboard of 5 meters below crest level. This has also been applied to the Jupiter Complex Open pits to ensure overfilling of the pits do not occur.</p>
		Direct discharge to land from overtopping of turkey's nest at the Jupiter complex	<ul style="list-style-type: none"> <li>Surrounding Vegetation</li> <li>Soils</li> </ul>	Refer to 3.1	C= Minor L = Unlikely <b>Medium Risk</b>	N	<ul style="list-style-type: none"> <li>Updated condition 1.2.3 – Requirements for containment infrastructure.</li> <li><b><u>Existing condition 1.2.4 – freeboard requirement</u></b></li> </ul>	<p>Condition 1.2.3 has been updated to include the Jupiter turkey nest as it is considered containment infrastructure.</p> <p>Condition 1.2.4 therefore will also apply to the turkey's nest – it requires a freeboard of 500mm to be maintained within the turkey's nest to prevent overtopping from occurring.</p>

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

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

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### 3.3 Detailed risk assessment – Impacts of seepage to native vegetation and Mt Morgans calcrete complex

#### 3.3.1 Source

##### Proposed dewater chemistry and Pit Capacity

Proposed dewater quality is more saline (280,000 mg/L TDS) than the current Jupiter pits water (180,000-260,000 mg/L TDS) quality. The dewater is taken from the active Mt Marven and Double Jay open pits and disposed into Ganymede and Heffernan via the turkey's nest. The Jupiter turkey nest processes water purely from the Jupiter complex. Dewater from the Mt Marven pit will only be used at the process mill when supply demands. Groundwater samples conclude that water chemistry is similar to that sampled at the turkey nest, pH neutral and hypersaline, however, groundwater had marginally higher concentration of nitrate and manganese than the dewater.

The capacity and description for the pits is as follows:

- Heffernan is a deep large open pit with a current storage capacity of almost 2,000 ML at 380 m RL. In May 2022, the measured water level water volume in Heffernan pit was 217.4 m RL, which correspond to a volume of 77.2 ML.
- Ganymede is a shallow pit with about 400 ML at 398 m RL. The measured water level in Ganymede was 387.5 m RL, which correspond to a volume of 89.9 ML.

##### Water balance

Groundwater Resource Management (GRM) developed a Pit Water balance for the Ganymede and Heffernan open pits which considered the following:

- Current capacity of the proposed pits;
- Discharge to the proposed pits; and
- Evaporation rates etc. over a 12-month period.

A water balance model was developed with the consideration of the inflows and outflows from the open pits, listed in Table 4 below.

**Table 4: Predicted inflows and outflows for Ganymede and Heffernan pits.**

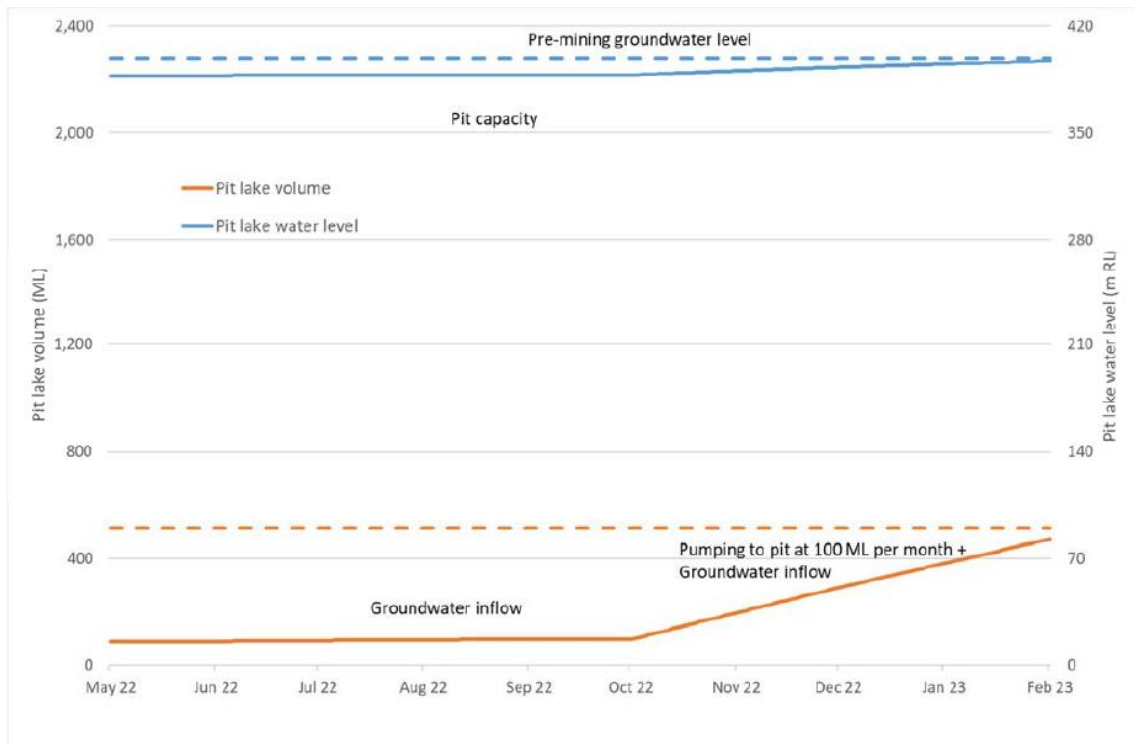
Inflows	Outflows
Direct rainfall on the pit lake	Evaporation from the pit
Pit wall runoff	
Groundwater inflows to the pit lake	Groundwater outflow from the pit lake (seepage)
Pumping to the pit lake	Pumping from the open pit.

Monthly average rainfall data was obtained from the closest weather station at Laverton Bureau of Meteorology (BoM) and evaporation data was obtained at the BoM Yamarna and Kalgoorlie airport.

##### Ganymede Pit:

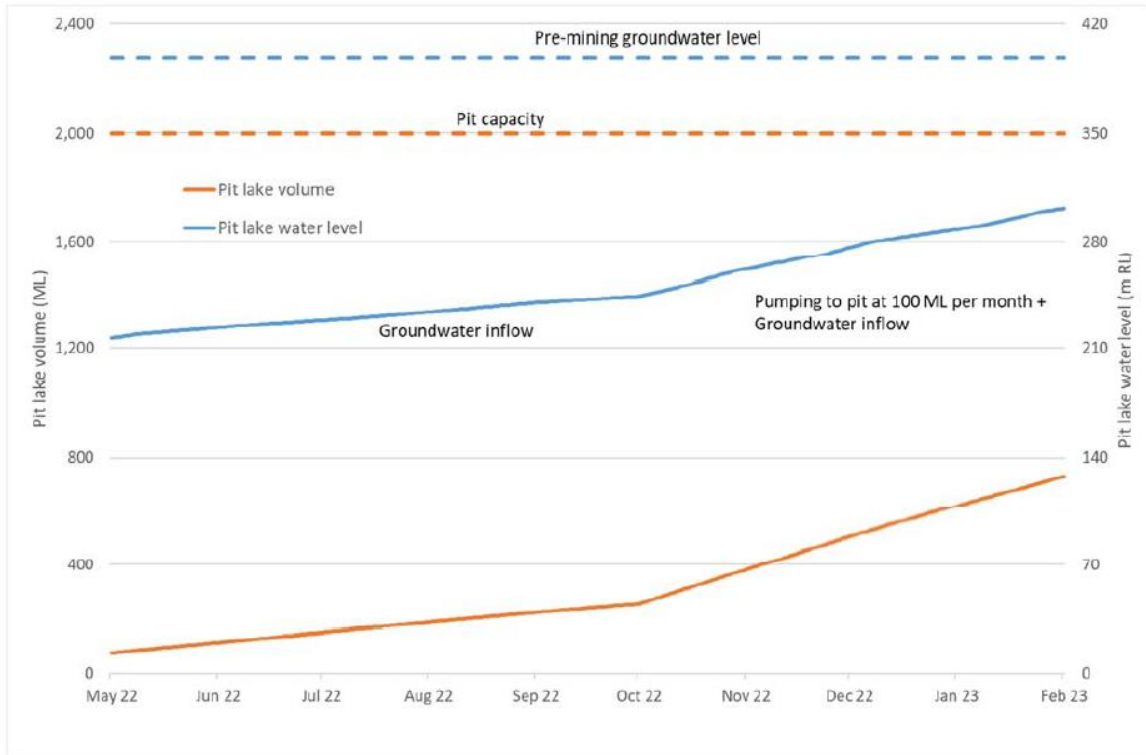
Figure 4 shows the predicted pit water levels and volumes for the Ganymede Pit between May 2022 and October 2022. The pit water is expected to increase gradually due to groundwater inflows. Due to level of water being pumped into the pit the predicted pit water volumes are estimated to be about 470 ML (below the 515 ML capacity).

Pit water levels are estimated to increase to 397 mRL, below the pre-mining groundwater levels of 399 m RL, therefore no groundwater seepage is predicted from the mine pit.



**Figure 5: Predicted pit lake volumes and water levels - Ganymede Pit Heffernan Pit**

Figure 5 shows the predicted pit water levels storage and volumes for the Heffernan Pit between May 2022 and October 2022. During this period pit water levels were expected to increase gradually due to groundwater inflows. Pit water levels and volumes are predicted to increase with water being pumped to the pit estimated to be about 700 ML, below the pit capacity of 2,000 ML. Likewise, pit water levels (301m) are predicted to be well below the pre-mining levels (399m). This indicates that no groundwater seepage is predicted from the mine pit.



**Figure 6: Predicted pit lake volumes and water levels - Heffernan Pit.**

The water balance study concluded that both the Ganymede and Heffernan pits have sufficient capacity to store more than 400 ML of surplus water from the operations without fear over overtopping. Pit lake water levels are predicted to be below that of the pre-mining groundwater levels of 399m RL and no seepage is predicted to occur from the pits.

### 3.3.2 Pathway and receptors

The Jupiter deposit is located within the Archean basement and is considered to have low aquifer potential with a possible fractured rock aquifer which trends east-west across the southern end of the Heffernans deposit. Rocks here are considered to have a Low permeability, consisting of fractured and weathered rocks.

2016 groundwater levels range from 398 mAHD and 399.7 mAHD at the Double Jay open pit. This predicts a low hydraulic gradient south towards Lake Carey.

There are no groundwater uses within the vicinity of the pits and groundwater is only used for mining purposes.

Native vegetation exists within the vicinity of the receiving pits and if groundwater mounding was to occur within 4 meters of the surface vegetation health may be impacted from roots coming into contact with hypersaline groundwater.

### 3.3.3 DWER assessment

It is expected that on site impacts from seepage of dewater from the base and walls of the receiving pits will be **minor** due to the fact that there are no nearby groundwater users and that water quality of the source and receiving groundwater is similar. The likelihood of impacts occurring has been determined to be **unlikely** as modelling has indicated that the receiving pits will act as groundwater sinks and that seepage is unlikely to occur. The overall risk rating for this risk event has therefore been determined to be **'medium risk'**.

To mitigate risk associated with seepage, DWER will place the following controls on the licence as regulatory control:

- Existing condition 3.2.1 has been updated to include the Jupiter complex open pits. This condition requires the receiving pits to have a limit freeboard of 5 meters below

crest level. This has also been applied to the Jupiter Complex Open pits. The freeboard requirement will ensure that if mounding were to occur it would not reach the root zones of native vegetation at the surface.

## 4. Consultation

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

**Table 5: Consultation**

Consultation method	Comments received	Department response
Licence Holder was provided with draft amendment on 4 November 2022	Response received 9 December 2022 requesting changes (DWERDT698804)	See Appendix 1

## 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
1.2.2	Addition of Jupiter turkey's nest as Containment Infrastructure
1.2.10 – 1.2.12	Removal of conditions
2.1.1	Emission point reference, remove reference to Double Jay open pit and addition of Ganymede Open Pit and Heffernan Open pit.
2.1.1	Addition of Mine dewater "via the Turkey's Nest".
2.1.1	Source including abatement Addition of Westralia open pit, Transvaal "open pit" and wash-down pad. Addition of Craic open pit, Double Jay open pit and Ganymede open pit.
3.2.1	Addition of Jupiter Complex Open Pits (Ganymede and Heffernan).
Map of Emission Points	Remove image on page 23 and replace with image on page 24

## References

1. Bennelongia Environmental Consultants (2016a). *Mt Morgans Gold Project: Short-Range Endemic Fauna Desktop Assessment*. Unpublished report prepared for Dacian Gold Limited.
2. Department of Environment Regulation (DER) 2015, *Guidance Statement: Setting Conditions*, Perth, Western Australia.
3. Department of Water and Environmental Regulation (DWER) 2020a, *Guideline: Environmental Siting*, Perth, Western Australia.
4. DWER 2020b, *Guideline: Risk Assessments*, Perth, Western Australia.
5. Ground Resources Management (GRN). 2022, *Pit Water Balance: Ganymede and Heffernan Open Pits*. Perth, Western Australia.
6. Mt Morgans WA Mining Pty Ltd. (2022). *Annual Environmental Report*. Perth, Western Australia.

## Appendix 1: Summary of Licence Holder's comments on risk assessment and draft conditions

Condition	Summary of Licence Holder's comment	Department's response
Category 6, Paragraph 1	Keep Mt Marvin as and discharge point and add Double Jay	Accepted
Category 6, Paragraph 2	Add Recreation open pit to King or Sarah Open pit	This source and discharge point has not been assessed as it was not included as part of the scope of the original application. A separate licence amendment will be required for this activity.
Category 6, Paragraph 3	Removal of line <i>The Jupiter open pits to Mt Marven open pits pipeline has not been constructed and an alternative is being sought</i>	Change accepted as the pipeline has been constructed
Table 2.1.1	Keep Double Jay as an Emission point reference and add Mt Marven open pit	Accept keeping Double Jay as emission point



## Appendix 2: 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"/> No <input type="checkbox"/>
		Has time limited operations under the works approval demonstrated acceptable operations?		Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
		Environmental Compliance Report / Critical Containment Infrastructure Report submitted?		Yes <input type="checkbox"/> No <input type="checkbox"/>
		Date Report received:		
Renewal	<input type="checkbox"/>	Current licence number:		
Amendment to works approval	<input type="checkbox"/>	Current works approval number:		
Amendment to licence	<input checked="" type="checkbox"/>	Current licence number:	L9010/2016/1	
		Relevant works approval number:	W6008/2016/1	N/A <input type="checkbox"/>
Registration	<input type="checkbox"/>	Current works approval number:		None <input type="checkbox"/>
Date application received		9/03/2022		
Applicant and Premises details				
Applicant name/s (full legal name/s)		Mount Morgan's WA Mining Pty Ltd		
Premises name		Mt Morgan's Gold Project		
Premises location		Mining tenements: M39/236, M39/395, M39/390, M39/272, M39/18, M39/228, M39/264, M39/304, M39/240, M39/248, L39/245, L39/246, M39/441, M39/250, M39/504, M39/745, M39/403, M39/282, M39/36 and M39/1107		
Local Government Authority		Shire of Laverton		

<b>Application documents</b>	
HPCM file reference number:	DER2016/002022-1~7
Key application documents (additional to application form):	<p>Jupiter Dewatering – Water Balance. Includes:</p> <ul style="list-style-type: none"> <li>- Highlighted amendments to be made</li> <li>- Water quality</li> <li>- Water balance prediction</li> </ul>
<b>Scope of application/assessment</b>	
Summary of proposed activities or changes to existing operations.	<p>Licence amendment.</p> <p>Mount Morgan are requesting to amend the licence (L9010/2016/1) to reflect the current dewatering processes at the site.</p>

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

**Table 1: Prescribed premises categories**

<b>Prescribed premises category and description</b>	<b>Assessed production or design capacity</b>	<b>Proposed changes to the production or design capacity (amendments only)</b>
Category 5: Processing or beneficiation of metallic or nonmetallic ore	3.5 million tonnes per annual period	
Category 6: Mine dewatering	1.2 million tonnes per annual period	
Category 54: Sewage facility	100kL per day	
Category 57: Used tyre storage (general)	450 tyres	
Category 64: Class II or III putrescible landfill site	4,500 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 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	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Reference No:

EPBC Act?		
Has the applicant demonstrated occupancy (proof of occupier status)?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	<p>Certificate of title <input type="checkbox"/></p> <p>General lease <input type="checkbox"/> Expiry:</p> <p>Mining lease / tenement <input checked="" type="checkbox"/></p> <p>Jupiter Complex: M 39/236 (expiry: 16 Dec 2032)</p> <p>Mount Marven: M 39/390 (expiry: 19 Nov 2029) and M 39/1107 (expiry: 28 Nov 2037) and M 39/36 (expiry: 3 Dec 2026)</p> <p>Other evidence <input type="checkbox"/></p>
Has the applicant obtained all relevant planning approvals?	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>	<p>Approval:</p> <p>Expiry date:</p> <p>Planning approvals are exempt under the <i>Mining Act</i></p>
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"/>	<p>CPS No: N/A</p> <p>No clearing is proposed.</p>
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"/>	<p>Application reference No: N/A</p> <p>Licence/permit No: N/A</p> <p>No clearing is proposed.</p>
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"/>	<p>Application reference No: 014274</p> <p>Licence/permit No: GWL169901</p>
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"/>	<p>Name: N/A</p> <p>Type: N/A</p> <p>Has Regulatory Services (Water) been consulted?</p> <p>Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/></p> <p>Regional office: N/A</p>
<b>Legislative context and other approvals</b>		

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 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"/> Jupiter Complex: M 39/236 (expiry: 16 Dec 2032) Mount Marven: M 39/390 (expiry: 19 Nov 2029) and M 39/1107 (expiry: 28 Nov 2037) and M 39/36 (expiry: 3 Dec 2026) Other evidence <input type="checkbox"/>
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: Planning approvals are exempt under the <i>Mining Act</i>
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 checked="" type="checkbox"/> No <input type="checkbox"/>	Application reference No: 014274 Licence/permit No: GWL169901

<p>Does the proposal involve a discharge of waste into a designated area (as defined in section 57 of the EP Act)?</p>	<p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p>	<p>Name: N/A  Type: N/A  Has Regulatory Services (Water) been consulted?  Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>  Regional office: N/A</p>
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