

## **Amendment Report**

## **Application for Licence Amendment**

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

Licence Number	L5529/1988/12
Licence Holder	Mt Magnet Gold Pty Ltd
ACN	008 669 556
File Number	DER2016/001228-1
Premises	Mt Magnet Gold M58/30, M58/79, M58/121, M58/136, M58/172, M58/181, M58/185, M58/186, M58/187, M58/191, M58/193, M58/202, M58/205 and M58/234
	MOUNT MAGNET WA 6638
Date of Report	11 September 2020
Proposed Decision	Revised licence granted

Lauren Fox A/MANAGER – RESOURCE INDUSTRIES INDUSTRY REGULATION

An officer delegated by the CEO under section 20 of the EP Act

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## 1. Decision summary

Licence L5529/1988/12 is held by Mt Magnet Gold Pty Ltd (licence holder) for Mt Magnet Gold (the premises), located within the suburb of Mt Magnet, in the Shire of Mt Magnet, 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 L5529/1988/12 has been granted.

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

#### **1.1 Dewatering activities**

Proposed dewatering activities including a new emission point (Milky Way Pit) and the reinstatement of historic diversion drains to capture surface water runoff, have been granted and are subject to conditions set out in the Revised Licence.

#### **1.2 Monitoring bores for CTS1 and CTS2**

The application proposes the inclusion of existing monitoring bores (HWB19, T1MB1, T2MB2) to monitor seepage from Checkers Tailings Storage Facility (CTSF) 1 and 2 to the licence.

The embankment raise of CTSF1 and CTSF2 and future deposition of tailings into these containment structures were assessed in works approval W6342/2020/1 (issued 17 July 2020), along with assessing the adequacy of these bores.

During the assessment these monitoring bores were determined to be insufficient and not adequate to monitor potential seepage, as per the findings set out in the decision report for W6342/2020/1. Conditions in W6342/2020/1 require the installation of new monitoring bores, which can effectively monitor seepage impacts from the premises, within one month of the issue date of the works approval. To date, information on these new bores has not yet been received by DWER.

The inclusion of existing monitoring bores HWB19, T1MB1, T2MB2 is therefore not granted, and is not re-assessed in this assessment.

## 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 <a href="https://www.der.wa.gov.au">https://www.der.wa.gov.au</a>.

#### 2.2 Application summary

On 20 May 2020, the licence holder submitted an application to the department to amend licence L5529/1988/12 under section 59 and 59B of the *Environmental Protection Act 1986* (EP Act).

The licence holder proposes amendments to the current dewatering network:

• Addition of new emission point (Milky Way Pit) to receive dewatering from Lone Pine

Pit, Eridanus Pit and O'Meara Pit;

- and/or discharge from Lone Pine Pit, Eridanus Pit and O'Meara Pit to Franks Tower (currently licensed emission point)- for dust suppression (only pumped if required); and
- re-establishment of surface water diversion into Milky Way Pit (Hill 50: Milky Way Water Diversion Mining Proposal Reg ID17012) and Stella Pit to supply either the potable water network or be diverted to Franks Tower Pit for dust suppression activities or processing requirements.

A whole site water balance including the proposed activities is shown in Figure 1. Dewatering pits and site overview is shown in Figure 2.

Additionally the licence holder proposes to incorporate 3 refurbished monitoring bores (HWB19, T1MB1 and T2MB2) to monitor seepage from the Checkers Tailings Storage Facility (CTSF) 1 and 2.



Figure 1 Water balance of the premises including proposed activities

## 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 *Guidance Statement: Risk Assessments* (DER 2017).

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 below.

Table 1 also details the proposed control measures the licence holder has proposed to assist in controlling these emissions, where necessary.

Emission	Sources (Figure 2)	Potential pathways	Proposed controls	
Dewater effluent	Milky Way Pit	Overtopping and infiltration	Estimated raise of water level (to 415 mAHD) in Milky Way Pit is well below the spill level of 442 mAHD	
	Franks Tower Pit	Overtopping	Franks Tower Pit is already authorised as an emission point on the current licence to receive dewater from Stellar, Stellar West, Milky Way, and Shannon underground; a minimum of 2 m freeboard is required to be maintained under the current licence.	
			Additional dewater from Eridanus, O'Meara, Lone Pine Pit only to be transferred to Franks Tower Pit if used for dust suppression or processing requirements (inflow will match outflow).	
	Milky Way Pit	Infiltration of pit water in unlined pit with groundwater through seepage and migration to PDWSAs	The application states that water quality from dewatering locations is generally better than the receiving emission pits. Current high salinity of Milky Way Pit lake will be reduced with additional surface water runoff and discharge from Eridanus.	
	Dewater pipelines	Direct discharge to soils, surface water and infiltration to groundwater	Flow meters and daily inspections to ensure integrity	
Surface water run off	Run off diversion drains to Milky Way and Stellar (reinstated) to receive discharge from Eridanus and	Overtopping	Stellar diversion drain has insufficient capacity to receive discharge from Eridanus and will be removed after water in pit lake is no longer required pumping ceases;	

 Table 1: Licence holder controls

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Emission	Sources (Figure 2)	Potential pathways	Proposed controls
	upstream run off.		Stellar requires active pumping to keep water levels below the freeboard.
			No freeboard controls for Stellar Pit and Milky Way Pit were proposed by the licence holder.



Figure 2 Location of dewatering pits, the PDWSA (Genga Reserve) and catchments

#### 3.1.2 Receptors

In accordance with the *Guidance Statement: Risk Assessment* (DER 2017), 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 (*Guidance Statement: Environmental Siting* (DER 2016)).

Table 2: Sensiti	ive human anc	l environmental	receptors and	distance from	prescribed
activity					

Human receptors	Distance from prescribed activity
Town of Mount Magnet	Approximately 2.4 km south east of premises boundary. Prevailing winds are from east and north-east
Environmental receptors	Distance from prescribed activity
Minor tributary of the Salt River	A number of minor non-perennial watercourses run north-south through the premises. The closest is a seasonal minor creek 200m east of Milky Way pit. Constructed diversions are present around northern part of the tailings storage facility and several pits. The Salt River is located 20 km away.
Groundwater East Murchison Groundwater area (RIWI Act 1914)	Groundwater flow in the borefield area is generally southward (DER, 2005). Groundwater levels are typically 5 - 15 mbgl, but can be substantially deeper in areas affected by pumping (DER, 2005) No information on underlying groundwater quality is available.
Groundwater - Public Drinking Water Source Areas (PDWSA) Figure 2, Figure 3	The nearest PDWSAs are the Mount Magnet Water Reserves (Genga Priority1 and Priority 2) and town water supply bores. The Genga P1 area is 4.7 km south of Milky Way pit; 3.3km south of O'Meara pit and 2.35km south of Eridanus pit. The Genga P2 area is 1.3 km west of Milky Way pit; 480m west of O'Meara pit and 80m west of Lone Pine pit.



Figure 3 Public Drinking Water Areas near the premises boundary

#### 3.2 Risk ratings

Risk ratings have been assessed in accordance with the *Guidance Statement: Risk Assessments* (DER 2017) 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 in-complete 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 L5529/1988/12 that accompanies this Amendment Report authorises emissions associated with the operation of the Premises i.e. ore processing, mine dewatering and landfill

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

Risk Event				Risk rating <sup>1</sup>			
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Licence Holder's controls	C = consequence L = likelihood	Conditions <sup>2</sup> of licence	Justification for additional regulatory controls
Construction							
Dewatering pipelines	Dust	Air/wind dispersion	Town of Mt Magnet 2.4 km south east of premises	N/A	C = Slight L = Unlikely <b>Low Risk</b> N/A	N/A	The Delegated Officer considers it unlikely a risk event for dust emissions will occur given the distance between the premises boundary and the closest residential receptor. Construction works are not considered to have significant dust emissions.

#### Table 3. Risk assessment of potential emissions and discharges from the Premises during operations

Operation							
<b>Category 6</b> Discharge of dewatering effluent from Lone Pine Pit, O'Meara Pit and Eridanus Pit to Milky Way Pit and *Franks Tower Diversion of surface water runoff into Milky Way Pit and Stella Pit (reinstatement of previous operational drains)	Discharge of dewater effluent in pit	Interaction with groundwater in unlined pit through seepage and migration to PDWSAs	PDWSA (P1/P2) The Genga P1 area is 4.7 km south of Milky Way Pit. The Genga P2 area is 1.3 km west of Milky Way Pit.	Refer to section 3.1.1	C = Moderate L = Possible <b>Medium Risk</b>	Conditions 1.3.8, 1.3.9, 1.3.13, 1.3.14, 2.2.1, 3.2.1 and 3.4.1	Refer to section 3.3
	Discharge of dewater via pit overtopping	Direct discharge to soils, surface waters and infiltration to groundwater via pit overtopping	PDWSA (P1/P2) The Genga P1 area is 4.7 km south of		C = Moderate L = Unlikely <b>Medium Risk</b>		Refer to section 3.4
Rupture of dewatering pipelines	Mine dewater (brackish)	Direct discharge to soils, surface waters and infiltration to groundwater	km south of Milky Way Pit. The Genga P2 area is 1.3 km west of Milky Way Pit. Contamination of surrounding land and surface waters (minor seasonal creek 200 m east).		C = Minor L = Unlikely <b>Medium Risk</b>	Conditions 1.3.9 and 1.3.11 (existing in licence)	Licence holder proposes flow meters on all pipelines and daily inspections to ensure integrity.

Note 1: Consequence ratings, likelihood ratings and risk descriptions are detailed in the Guidance Statement: Risk Assessments (DER 2017).

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

\*Franks Tower currently authorised to receive water from Stellar, Stellar West, Milky Way, Shannon underground

#### 3.3 Risk assessment – Infiltration of pit water into groundwater

Dewater effluent deposited into Milky Way Pit may result in infiltration into groundwater and affecting water quality including the nearby Public Drinking Water Source Area (PDWSA) (Mt Magnet Water Reserve, P1 and P2).

#### 3.3.1 Identification and general characterisation of emission

An overview of the pit water quality from the site is listed in Table 4. Generally, the water quality is better in dewatering source pits compared to the receiving pits (Milky Way Pit, Franks Tower Pit).

However, no information on the groundwater quality and depth underlying the emission points has been provided with the application. Further information on that matter was requested by the department from the licence holder. In the response received 3 July 2020 (DWERDT303461), the applicant states that groundwater depth is not relevant to assessment of risk to Genga Borefield as the pits sit within the groundwater table. Groundwater quality was described as complex and variable due to the long history of mining and process activities. No details or groundwater measurements have been provided by the licence holder.

Project Name			Eridanus	Ba	rtus	Stellar		
Bore ID	Lone Pine Dewatering Point	Eridanus Dewatering Point	O'Meara Dewatering Point	Franks Tower Emission Point <sup>1</sup>	Milky Way Emission Point <sup>1</sup>	Bartus Dewatering Point <sup>2</sup>	Bartus South Dewatering Point <sup>2</sup>	Stellar Pit Runoff Receival Point
Date	6/03/2019	3/03/2020	1/03/2020	15/03/2020	3/03/2020	18/04/2019	16/04/2019	12/04/2020
pH (lab)	8.7	7.9	8.6	7.16	7.9	8.6	7.9	7.05
EC (lab) (µS/cm)	1200	10000	2200	11000	15000	5500	55000	2200
TDS (mg/L)	640	6500	1200	6500	10000	7100	41000	1300
Al (mg/L)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01
Ag (mg/L)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001
As (mg/L)	<0.001	0.003	0.001	0.35	0.008	0.32	0.14	0.002
B (mg/L)	0.43	0.97	0.67	1.9	1.7	3.5	4.8	0.7
Cd (mg/L)	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0002	<0.0001
Co (mg/L)	<0.001	0.005	<0.001	< 0.001	0.002	<0.001	<0.002	0.002
Cr6 (mg/L)	<0.005	<0.005	<0.005	< 0.005	<0.005	<0.005	<0.005	<0.005
Cu (mg/L)	0.001	0.003	0.001	< 0.001	<0.001	<0.001	0.002	0.002
Fe (diss) (mg/L)	<0.01	0.01	<0.01	0.01	<0.01	<0.01	<0.02	<0.01
Mn (mg/L)	<0.005	0.24	0.006	0.11	<0.005	<0.005	0.26	0.081
Hg (mg/L)	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Mo (mg/L)	0.003	0.008	0.005	0.018	0.047	0.049	0.01	0.011
Ni (mg/L)	<0.001	0.003	<0.001	0.003	0.007	<0.001	0.013	0.03
Pb (mg/L)	<0.001	<0.001	0.001	< 0.001	<0.001	<0.001	<0.002	<0.001
Se (mg/L)	<0.001	0.003	0.001	0.003	0.02	0.012	0.006	0.005
Zn (mg/L)	0.004	0.005	0.002	0.002	0.095	0.001	<0.002	0.002
NO <sub>3</sub> (mg/L)	4.3	79	32	240	66	26	<25	150

#### Table 4 Pit water quality (dewatering source highlighted in yellow)

Note 1: Alternate options for the emission point.

2: Emission point is Franks Tower Pit.

#### 3.3.2 Pathway and receptor

Dewatering effluent deposited into Milky Way Pit and Franks Tower Pit may infiltrate and interact with underlying groundwater, potentially adversely impacting water quality and contaminating the PDWSA (P1, P2) in close proximity to the premises (Figure 3). The proposed new emission point (Milky Way Pit) is located 1.26 km to the east from the Genga Reserve (P2) (Figure 2).

While the pit water quality has been shown to be better in dewatered pits compared to receiving pits, no information on the groundwater quality below the pits has been provided. Further investigations into site hydrology has been required under works approval W6342/2020/1.

The application suggests no impact to the Genga Borefield should occur due to low permeability of the fractured rocks in the area and the resulting cone of drawdown will be steep and narrow.

Currently no groundwater monitoring is undertaken to the west of dewatering activities (including in proximity of proposed emission point Milky Way Pit) to confirm the containment of dewater effluent and no migration towards the PDWSA.

#### 3.3.3 Rating of this risk event

No details on the groundwater quality and the confirmation of no potential pathway of dewater effluent to reach the PDWSA is available.

The Delegated Officer considers the consequence of infiltration of pit water into groundwater and potentially contaminating the PDWSA to be **Moderate**.

No confirmation of the dewater containment in pits is currently available. The Delegated Officer has considered the likelihood as **Possible**.

The Delegated Officer has compared the consequence and likelihood of this risk event and determined the overall rating is **Medium**. Based in this rating, the risk event is subject to some regulatory controls

#### 3.3.4 Regulatory controls

For the proposed dewatering activities assessed in this amendment report, an appropriate groundwater monitoring network is required to be established. An adequate amount of monitoring bores with representative depth and location in proximity to the new emission points, is required to monitor groundwater quality, depth and any potential infiltration of pit water into the groundwater.

#### 3.3.5 Conclusion

The above described risk event was rated as Medium and requires some regulatory controls to confirm no pathway to the PDWSA and impacts to groundwater quality. Monitoring bores can establish the groundwater quality, as well as confirming that brackish dewater is contained and does not migrate past the pits.

#### 3.4 Risk assessment- Overtopping of pits

Overtopping of pits may result in subsurface infiltration and impacts on groundwater and migration to the nearby PDWSA. A similar pathway and same receptors are considered for this risk event as the set out in section 3.3.

Overtopping may result from transferring dewater effluent from Eridanus, Lone Pine Pit or O'Meara into Milky Way Pit or Franks Tower Pit. Additionally, historical diversion drains to divert rainfall runoff from the upper Lone Pine Catchment to Stellar Pit and runoff from the upper Milky Way Catchment to Milky Way Pit are proposed, adding to the volume received by the pits.

Proposed volumes and inflows received by the pits are listed in Table 5.

#### Table 5 Water balance summary

Receiving pit	Receiving pit Source		Outflow and water level	
Milky Way or Franks Tower*	Eridanus	5-10 L/sec max 316 ML/year	Pumping to sub-potable water supply	
	Lone Pine	Over 3 months: 6 L/sec 50 ML/year		
	O'Meara	Over 3 months: 15 L/sec 120 ML/year		
	Estimated total inflow from Eridanus, Lone Pine and O'Meara Pits	486 ML/year	Outflow from Franks Tower to be matched the inflow to retain pit freeboard (2 m	
Milky Way	Rainfall runoff from upper Milky Way Catchment (1.2 km² area)	0.2 – 4 ML/year	Expected water level of Milky Way Pit with additional inflows is 415mAHD Milky way Pit currently has no freeboard requirements.	
Stellar	Rainfall runoff from upper Lone Pine Catchment (3.7 km <sup>2</sup> area)	1 – 17 ML/year	Active pumping required. Stellar Pit currently has no freeboard requirements.	

\*Franks Tower currently authorised to receive water from Stellar, Stellar West, Milky Way, Shannon underground

#### 3.4.1 Rating of this risk event

The Delegated Officer considers the consequence of pit overtopping to be Moderate.

Based on the information provided, the Delegated Officer has considered the likelihood as **Unlikely.** 

The Delegated Officer has compares the consequence and likelihood of this risk event and determined the overall rating is **Medium**. Based in this rating, the risk event is subject to some regulatory controls

#### 3.4.2 Regulatory controls

To mitigate the risk of overtopping of the receiving pits, a freeboard is required to be maintained for Milky Way and Stellar Pit, and inspected regularly to confirm. Due to the smaller size of Stellar Pit and the potential risk of overtopping, runoff is only authorised to be diverted during active pumping as proposed in the application. Pumps are required to be inspected to ensure integrity.

#### 3.4.3 Conclusion

Historic diversion drains are authorised to be reinstated and to divert rainwater runoff into Stellar and Milky Way pit, subject to conditions. The risk of overtopping of receiving pits is mitigated by required freeboards and daily inspections.

## 4. Consultation

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

#### Table 6: Consultation

Consultation method	Comments received	Department response
Shire of Mt Magnet advised of proposal (11 August 2020)	N/A	N/A
Department of Mines, Industry Regulation and Safety (DMIRS) advised of proposal <i>(</i> 11 August 2020)	Notification that Mining Proposal recently approved for Eridanus pit did not include disposal of dewater to Milky Way Pit. DMIRS to follow up with the applicant.	N/A

## 5. Conclusion

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

#### 5.1 Summary of amendments

Table 7 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.

Condition no.	Proposed amendments			
1.3.8 Table 1.3.4	Milky Way and Stellar Pit listed as a containment point in Table 1.3.4. As with the other listed containment structures, a 2 m freeboard is to be maintained.			
	For Stellar pit rainwater drainage is only to occur during active pumping.			
1.3.9	Milky Way Pit and Stellar Pit (including pump) added to scope of inspection in Table 1.3.5.			
1.3.13, 1.3.14	Construction of monitoring bores & infrastructure requirements to capture potential			
Table 1.3.8	impacts by dewatering activities.			
2.2.1	Milky Way pit is to be included as an emission point reference in Table 1.3.5 and Eridanus pit, Lone Pine pit, O'Meara pit are to be included as sources within Table 1.3.5			
	Stellar Pit included as emission point reference.			
3.2.1	Milky Way pit is to be included as an emission point reference in Table 3.2.1.			

 Table 7: Summary of licence amendments

Condition no.	Proposed amendments
3.4.1 Table 3.4.1	New monitoring bores added to monitoring of ambient groundwater quality.
Schedule 1: Maps	Map of emission points was added showing new sources and emission points. Map showing the catchment areas and water drainage was added.

## References

- 1. Department of Environment Regulation (DER) 2016, *Guidance Statement: Environmental Siting*, Perth, Western Australia.
- 2. DER 2017, Guidance Statement: Risk Assessments, Perth, Western Australia.
- 3. DER 2015, Guidance Statement: Setting Conditions, Perth, Western Australia.
- 4. Mt Magnet Gold Pty Ltd, 11 May 2020, Application Form Amendment (DWERDT285602)
- MWES Consulting, 29 June 2019, Information Requested by Department of Water and Environmental Regulation Application for Amendment to Licence L5529/1988/12 Environmental Protection Act 1986 (DER2016/001228)
- 6. MWES Consulting, 1 March 2017 Mt Magnet Gold Multi-pit Mining Project Hydrology and Hydrogeology Assessment. East Perth, Western Australia.
- Government of Western Australia Department of Water and Environmental Regulation L5529 - 1988-12 Mt Magnet Gold - Amalgamated Licence FINAL, June 2020. Perth, Western Australia.
- 8. DWER, 24 June 2020 Request for further information (A1906036)
- 9. Mt Magnet Gold Pty Ltd, 3 July 2020, Response to request to further information (DWERDT303461)
- 10. DOE, 2005 Department of Environment Mount Magnet Water Reserve Drinking Water Source Protection Plan accessed at www.dwer.wa.gov.au

# Appendix 1: Summary of licence holder's comments on risk assessment and draft conditions

Condition	Summary of licence holder's comment	Department's response
Licence holder was provided with draft amendment on (27 August 2020)	The licence holder requests to change the timeframe to install and operate monitoring bores from 1 month to 3 months after this licence amendment issue (condition 1.3.13, Table 1.3.8).	Agreed and timeframe adjusted to 3 months

## Appendix 2: Application validation summary

SECTION 1: APPLICATION SUMMARY						
Application type						
Works approval						
		Relevant works approval number:		Non e		
		Has the works approval been complied with?		Yes 🗆	Yes 🗆 No 🗆	
Licence		Has time limited operations under the works approval demonstrated acceptable operations?		Yes □	] No □ N/A	
		Environmental Compliance Report / Critical Containment Infrastructure Report submitted?		Yes 🗆 No 🗆		
		Date Report received:				
Renewal		Current licence number:				
Amendment to works approval		Current works approval number:				
		Current licence number:	L5529-1988-12	988-12		
Amendment to licence		Relevant works approval number:		N/A		
Registration		Current works approval number:		Non e		
Date application received		20 May 2020				
Applicant and Premises details						
Applicant name/s (full legal name/s)		Mt Magnet Gold Pty Ltd				
Premises name		Mt Magnet Gold				
		Mining Tenements				
Premises location		M58/30, M58/79, M58/121, M58/136, M58/172, M58/181, M58/185, M58/186, M58/187, M58/191, M58/193, M58/202, M58/205 and M58/234				
Local Government Authority		Shire of Mt Magnet				
Application documents						
HPCM file reference number:		DER2016/001228-1				
Key application documents (additional		Attachments to the application form:				

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to application form):	<ul> <li>Attachment 2 Premises Map</li> <li>Attachment 2A Eridanus Dewatering Overview Map</li> <li>Attachment 2B Checkers TSF Monitoring and Recovery Bore Locations</li> <li>Attachment 3B Eridanus Project Dewatering Report</li> <li>Attachment 3B-1 Laboratory Reports</li> <li>Attachment 7 Siting &amp; Location Map</li> <li>Attachment 9 Proposed Amendment Fee Calculation</li> </ul>	
	Licence amendment	
	<ul> <li><u>Cat 6 Mine dewatering.</u></li> <li>Proposal to amend mine dewatering network including: <ul> <li>addition of new emission point (Milky Way Pit) to receive dewatering from Lone Pine Pit, Eridanus Pit and O'Meara Pit</li> <li>and/or to discharge from Lone Pine Pit, Eridanus Pit and O'Meara to Franks Tower (currently licensed emission point)- for dust suppression (only pumped if required)</li> </ul> </li> </ul>	
	to enable the expansion of the Eridanus cutback (currently being assessed for DMIRS approval - Reg ID 85967).	
Summary of proposed activities or	Construction consists of pipelines which will include flow meters and inspected daily;	
changes to existing operations.	In addition, Mt Magnet Gold are proposing to re-establish a DMIRS approved surface water diversion into the Milky Way Pit (Hill 50: Milky Way Water Diversion Mining Proposal Reg ID17012 to supply either the potable water network or be diverted to Franks Tower Pit for dust suppression activities or processing requirements.	
	<u>Cat 5 Processing or beneficiation of metallic or non-metallic</u> <u>ore</u> .	
	Mt Magnet Gold are proposing to incorporate 3 refurbished monitoring bores (HWB19, T1MB1 and T2MB2) to monitor seepage from the Checkers Tailings Storage Facility (CTSF) 1 and 2.	
	<b>Note:</b> These were also proposed as part of the works approval for the embankment raises of TSF1,2 and 3 & reinstatement of TSF1 and 2. These bores were found unsuitable in the works approval assessment (W6342)	

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

#### Table 1: Prescribed premises categories

Prescribed premises category A and description description		essed production or ign capacity	Proposed changes to the production or design capacity (amendments only)	
Category 5: Processing or beneficiation of metallic or non- metallic ore: premises on which –		0,000 tonnes per annua od	ll	
<ul> <li>(a) Metallic or non-metallic ore is crushed, ground, milled or otherwise processed; or</li> <li>(b) Tailings from metallic or non- metallic ore are reprocessed</li> <li>(c) Tailings or residue from metallic or non-metallic ore are discharged into a containment cell or dam.</li> </ul>				
Category 6: Mine dewatering: premises on which water is extracted and discharged into the environment to allow mining of ore.		000 tonnes per annum		
Category 64: Class II putrescible landfill site	10 000 tonnes per annual period		ıl	
Legislative context and other app	Legislative context and other approvals			
Has the applicant referred, or do the	hey		Referral decision No:	
EPA under Part IV of the EP Act a	e Is a	Yes 🗆 No 🛛	Managed under Part V $\Box$	
significant proposal?			Assessed under Part IV $\Box$	
Does the applicant hold any existing Part IV Ministerial Statements relevant to the application?		Yes □ No ⊠	Ministerial statement No: EPA Report No:	
Has the proposal been referred and/or assessed under the EPBC Act?		Yes □ No ⊠	Reference No:	
Has the applicant demonstrated occupancy (proof of occupier status)?			Certificate of title	
			General lease   Expiry:	
		Yes 🛛 No 🗆	Mining lease / tenement ⊠ Expiry:	
			M58/30 – 7 August 2027	

		M58/79 – 5 May 2030
		M58/121 – 15 December 2030
		M58/136 – 16 August 2030
		M58/172 – 10 September 2032
		M58/181 – 19 March 2034
		M58/185 – 8 August 2033
		M58/186 - 8 August 2033
		M58/187 – 11 December 2033
		M58/191 – 10 March 2034
		M58/193 – 26 October 2034
		M58/202 – 2 December 2034
		M58/205 - 10 June 2035
		M58/234 – 10 July 2038
		Other evidence   Expiry:
Has the applicant obtained all		Approval:
relevant planning approvals?		Expiry date:
	Yes □ No □ N/A ⊠	If N/A explain why?
		Planning approvals not required
		for proposed amendments.
Has the applicant applied for, or have		CPS No: CPS [7445-1]
an existing EP Act clearing permit in relation to this proposal?	Yes ⊠ No ⊔	No clearing is proposed.
Has the applicant applied for, or have		Application reference No: N/A
an existing CAWS Act clearing licence	Yes □ No ⊠	Licence/permit No: N/A
		No clearing is proposed.
Has the applicant applied for, or have		Application reference No:
an existing RIWI Act licence or permit		Licence/permit No:
in relation to this proposal?		
		A valid licence is held by Mt
	Yes 🛛 No 🗆	Magnet Gold (GWL151513(8)).
		getting updated - to include
		changes from the Eridanus
		Expansion and other operational requirements.
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Does the proposal involve a discharge of waste into a designated area (as defined in section 57 of the EP Act)?	Yes □ No ⊠	Name: N/AType: Proclaimed surface and groundwater AreaHas Regulatory Services (Water) been consulted?Yes ⊠ No □ N/A □Regional office: Mid-West Gascoyne
Is the Premises situated in a Public Drinking Water Source Area (PDWSA)?	Yes 🛛 No 🗆	<ul> <li>Name: Genga Reserve</li> <li>Priority: P1 / P2</li> <li>Are the proposed activities/ landuse compatible with the PDWSA (refer to WQPN 25)?</li> <li>Yes □ No □ N/A ⊠</li> <li>The Mount Magnet Water Reserve and town dam catchment are proclaimed for the purpose of water source protection. The groundwater portion of the current Water Reserve consists of the Genga (P1 and P2) areas.</li> <li>The Genga P1 area is 4.5 km south of Milky Way Pit; 3.3km south of O'Meara Pit and 2.35km south of Eridanus Pit.</li> <li>The Genga P2 area- parts within premises boundary; 1.3 km west of Milky Way Pit; 480m west of O'Meara Pit and 80m west of Lone Pine Pit.</li> <li>Lennonville P1 area- borders on northern side of premises boundary</li> </ul>
Is the Premises subject to any other Acts or subsidiary regulations (e.g. Dangerous Goods Safety Act 2004, Environmental Protection (Controlled Waste) Regulations 2004, State Agreement Act xxxx)	Yes ⊠ No □	Mining Act 1978 RIWI Act 1914
Is the Premises within an Environmental Protection Policy (EPP) Area?	Yes □ No ⊠	

Is the Premises subject to any EPP requirements?	Yes □ No ⊠	
Is the Premises a known or suspected contaminated site under the <i>Contaminated Sites Act 2003</i> ?	Yes ⊠ No □	Classification: Possibly contaminated – investigation required (Geocortex 2017) Date of classification: 2017 The Applicant has previously advised suspected contamination at the site.