



# Decision Document

## *Environmental Protection Act 1986, Part V*

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**Proponent:** Mt Magnet Gold Pty Ltd

**Licence:** L5529/1988/12

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**Registered office:** Mt Magnet Gold Pty Ltd  
Suite 4, 148 Greenhill Road  
PARKSIDE SA 5063

**ACN:** 008 669 556

**Premises address:** Mt Magnet Gold  
M58/121, M58/193 and M58/205  
MOUNT MAGNET WA 6623

**Issue date:** Thursday, 3 September 2015

**Commencement date:** Thursday, 10 September 2015

**Expiry date:** Tuesday, 9 September 2025

### Decision

Based on the assessment detailed in this document the Department of Environment Regulation (DER), has decided to issue an amended Licence. DER considers that in reaching this decision, it has taken into account all relevant considerations and legal requirements, and that the amended Licence and its conditions will ensure that an appropriate level of environmental protection is provided.

Decision Document prepared by: Paul Anderson  
Licensing Officer

Decision Document authorised by: Alana Kidd  
Delegated Officer



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## 1 Purpose of this Document

This decision document explains how DER has assessed and determined the application and provides a record of DER's decision-making process and how relevant factors have been taken into account. Stakeholders should note that this document is limited to DER's assessment and decision making under Part V of the *Environmental Protection Act 1986*. Other approvals may be required for the proposal, and it is the proponent's responsibility to ensure they have all relevant approvals for their Premises.

## 2 Administrative summary

Administrative details		
Application type	Works Approval <input type="checkbox"/> New Licence <input type="checkbox"/> Licence amendment <input checked="" type="checkbox"/> Works Approval amendment <input type="checkbox"/>	
Activities that cause the premises to become prescribed premises	<b>Category number(s)</b>	<b>Assessed design capacity</b>
	5	2,400,000 tonnes per annual period
	6	500,000 tonnes per annual period
	64	10,000 tonnes per annual period
Application verified	Date: Not applicable	
Application fee paid	Date: Not applicable	
Works Approval has been complied with	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>	
Compliance Certificate received	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>	
Commercial-in-confidence claim	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Commercial-in-confidence claim outcome		
Is the proposal a Major Resource Project?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Was the proposal referred to the Environmental Protection Authority (EPA) under Part IV of the <i>Environmental Protection Act 1986</i> ?	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"/>
Is the proposal subject to Ministerial Conditions?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Ministerial statement No: EPA Report No:
Does the proposal involve a discharge of waste into a designated area (as defined in section 57 of the <i>Environmental Protection Act 1986</i> )?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Department of Water consulted Yes <input type="checkbox"/> No <input type="checkbox"/>	
Is the Premises within an Environmental Protection Policy (EPP) Area Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> If Yes include details of which EPP(s) here.		
Is the Premises subject to any EPP requirements? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> If Yes, include details here, eg Site is subject to SO <sub>2</sub> requirements of Kwinana EPP.		

### 3 Executive summary of proposal and assessment

Mt Magnet Gold Pty Ltd (MMG) operates the Mt Magnet Gold Mine (Mt Magnet Gold) through *Environmental Protection Act 1986* Licence L5529/1988/11 (Licence).

Mt Magnet Gold is located adjacent to the town of Mount Magnet in the Murchison Region of Western Australia. Tenements for the mine cover an area of approximately 225 square kilometres however the prescribed activities are located on Mining Tenements M58/121, M58/193 and M58/205.

MMG has applied to DER for an amendment to their Licence. The request for an amendment to the Licence relates to the removal of a groundwater monitoring bore which is no longer functional and has been replaced by two additional groundwater monitoring bores, change the landfill category from 89 to 64 for an increase in the throughput to 10,000 tonnes per annual period, update the monitoring locations referenced in Table 3.4.1 and update the maps in Schedule 1.

MMG's Licence was reissued on the 3 September 2015 and as part of that reissue process, DER converted the Licence into the latest licensing format. Any additional changes made as part of this Licence amendment process, are described in more detail in the decision table in section 4 of this document.



## 4 Decision table

All applications are assessed in line with the *Environmental Protection Act 1986*, the *Environmental Protection Regulations 1987* and DER's Operational Procedure on Assessing Emissions and Discharges from Prescribed Premises. Where other references have been used in making the decision they are detailed in the decision document.

DECISION TABLE			
Works Approval / Licence section	Condition number W = Works Approval L = Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
General conditions	L1.2.1 to L1.2.3	<b>Operation</b> The Licence does not reference any pollution control equipment used at the Premises and therefore previous condition 1.2.1 has been removed from the Licence.  Previous condition 1.2.3 has been removed from the Licence as it is unclear what stormwater infrastructure is required to be constructed and maintained, or what if any specific management actions are required. The potential discharge of contaminated stormwater to the environment is considered adequately regulated by the <i>Environmental Protection Act 1986</i> .	General provisions of the <i>Environmental Protection Act 1986</i> .  <i>Environmental Protection (Unauthorised Discharges) Regulations 2004</i>
Premises operation	L1.3.1 to 1.3.11	<b>Operation</b>  <b>Landfill</b> The prescribed premises table on the Licence has been amended for the class II landfill by replacing category 89 with category 64 and increasing the throughput to 10,000 tonnes per annum (tpa).  MMG currently accepts at the Mt Magnet Gold landfill less than 720 tonnes per annum of mainly inert waste with small quantities of putrescible and special waste type 1 wastes (as reported in MMG's 2014-2015 Annual Environmental Report). All wastes accepted for burial at the landfill is generated at Mt Magnet Gold.	<i>Environmental Protection Regulations 1987</i> .  Landfill Waste Classification and Waste Definitions 1996' published by the Chief Executive Officer of the Department of Environment



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		<p>MMG has requested an amended to their Licence by increasing the throughput at the landfill to 10,000 tpa. MMG are progressing with mine closure activities which includes removal of redundant infrastructure and associated wastes, and the closure of historic and inactive mining areas. These works will increase the requirement for the burial of construction and demolition wastes, scrap metals and poly-pipe. The majority of materials will be Inert Waste Type 1 with lesser amounts of Inert Waste Type 2 and Special Waste Type 1 (used tyres and asbestos containing wastes respectively).</p> <p>Category 89 is usually applied to a registered premises as described in Schedule 1, Part 2 of the <i>Environmental Protection Regulations 1987</i> (Regulations), and is normally associated with small rural type premises accepting class II wastes which has been generated offsite. The maximum throughput permitted in the Regulations for category 89 is 5,000 tpa.</p> <p>Category 64 is a licence category as described in Schedule 1, Part 1 of the Regulations, whereby conditions are applied to the licence for its operation. Category 64 usually applies to all other class II or III putrescible landfills (as defined in the Landfill Waste Classification and Waste Definitions 1996, DER) which do not satisfy the requirements for a category 89 registration. Category 64 has a minimum throughput of 20 tpa or more, with no upper limit.</p> <p><u>Emission Description</u></p> <p><i>Emission:</i> Increase throughput of waste disposal to the landfill from 5,000 tpa to 10,000 tpa. Potential leaching to groundwater, wind blown waste.</p> <p><i>Impact:</i> Potential for contamination of surrounding environment, including surface water and groundwater.</p> <p><i>Controls:</i> The increased waste accepted for burial mainly consists of Inert Waste Type 1 which is made up of demolition wastes (concrete), scrap metals and poly-pipe. Only a small increase in Inert Waste Type 2 and Special Waste Type 1 (used tyres and</p>	<p>Regulation as amended from time to time.</p> <p>General provisions of the <i>Environmental Protection Act 1986</i>.</p>



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		<p>asbestos containing wastes respectively) is expected for burial. There is no increase in the burial of putrescible wastes. The depth to groundwater is greater than 130 m below ground level. The nearest surface water body (drainage creek) is more than 500 m away. The landfill is located within an historical tailings storage facility which had minimal use for tailings disposal over 15 years ago. The landfill is constructed with greater than 30 m high earthen walls surrounding the perimeter of the facility (Appendix A). These walls assist in retaining any contaminated stormwater within the landfill area and reduce the likelihood of wind blown waste escaping.</p> <p><u>Risk Assessment</u> <i>Consequence:</i> Insignificant <i>Likelihood:</i> Rare <i>Risk Rating:</i> Low</p> <p><u>Regulatory Controls</u> Conditions for the operation of the Mt Magnet landfill are already included in the Licence. Condition 1.3.2 allows the Licensee to accept for burial at the landfill, up to 10,000 tpa of Inert Waste Type 1, Putrescible Waste, Special Waste Type 1 and Inert Waste Type 2 only. Condition 1.3.3 requires the Licensee to store in a quarantined area and then remove from the Premises when practicable, any waste that does not meet the acceptance criteria required in condition 1.3.3. Condition 1.3.4 establishes criteria for the storage, handling and burial of waste accepted at the landfill. Condition 1.3.5 establishes criteria for the covering of each waste type accepted at the landfill for burial. Condition 1.3.6 requires the Licensee to collect any windblown waste that has blown outside of the landfill area and return it to the tipping area on a weekly basis.</p> <p><u>Residual Risk</u></p>	



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		<p><i>Consequence:</i> Insignificant <i>Likelihood:</i> Rare <i>Risk Rating:</i> Low</p> <p>Condition 1.3.7 has been removed from the Licence because it doesn't relate to a prescribed activity or related to a prescribed activity.</p> <p>Condition 1.3.10 is a new condition which has been added to the Licence to include production or capacity limits for categories 5 and 6. Limits have already been applied through condition 1.3.2 for waste accepted at the landfill (new category 64).</p>	
Ambient quality monitoring	L3.4.1	<p><b>Operation</b> Condition 3.4.1 has been amended by removing monitoring points T3MB3, PHMB1 and PHMB2 and adding replacement monitoring points T3MB9, T3MB10, PHMB3 and PHMB4.</p> <p>MMG has not been able to obtain a representative water sample from groundwater monitoring bore T3MB3 as it has silted up over time. MMG conducted a survey of the groundwater in that area to ensure the significant groundwater flows were identified. An outcome of the survey was MMG installed groundwater monitoring bores T3MB9 and T3MB10 in February 2015 to replace T3MB3. Preliminary groundwater sampling from T3MB9 and T3MB10 indicates water levels and quality is similar to that previously identified in T3MB3. Therefore the same sampling requirements which were applied to T3MB3 in condition 3.4.1, will now be applied to T3MB9 and T3MB10.</p> <p>Groundwater monitoring bores PHMB1 and PHMB2 were re-drilled in April 2014 and were renamed PHMB3 and PHMB4 respectively. During the Licence reissue in September 2015 these name changes was overlooked. Therefore monitoring points PHMB1 and PHMB2 in Table 3.4.1 have been replaced with PHMB3 and PHMB4 respectively. The map of monitoring locations has been updated to reflect the changes.</p>	General provisions of the <i>Environmental Protection Act 1986</i> .



DECISION TABLE			
Works Approval / Licence section	Condition number W = Works Approval L = Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
Information	4.1.2	Condition 4.1.2 has been removed from the Licence as required by DER's Operational Procedure IR-OP-02 – Redundant Conditions, Schedule 1.	Department of Environment Regulation, <i>Operational Procedure IR-OP-02 – Redundant Conditions</i> , 19 May 2016
Licence Duration	N/A	The Licence duration has been updated in line with DER's Guidance Statement <i>Licence Duration</i> to the 9 September 2025.	N/A





## 5 Advertisement and consultation table

Date	Event	Comments received/Notes	How comments were taken into consideration
25/5/2016	Proponent sent a copy of draft instrument	Comments received 8/06/2016 and are described below: <ul style="list-style-type: none"><li>• Licensee wishes for the Brown Hill pit for dewatering to be retained in the Licence as dewatering will still be occurring (Titan to B Hill) for the time being. Brown Hill will continue to be de-watered to the processing pond and utilised at Checker Mill for the purpose of gold processing operations; and</li><li>• The maps in the amended licence pages 14 &amp; 15 Map of emission points &amp; map of monitoring locations are old maps and not the maps supplied with the amendment (from email sent on 22/03/16)</li></ul>	All reference to Brown Hill as a dewatering location will be retained within the Licence. Monitoring of the Brown Hill pit will also remain. Maps have been updated as requested.
16/6/2016	Licence amendment signed	N/A	N/A



## 6 Risk Assessment

*Note: This matrix is taken from the DER Corporate Policy Statement No. 07 - Operational Risk Management*

**Table 1: Emissions Risk Matrix**

Likelihood	Consequence				
	Insignificant	Minor	Moderate	Major	Severe
Almost Certain	Moderate	High	High	Extreme	Extreme
Likely	Moderate	Moderate	High	High	Extreme
Possible	Low	Moderate	Moderate	High	Extreme
Unlikely	Low	Moderate	Moderate	Moderate	High
Rare	Low	Low	Moderate	Moderate	High



## APPENDIX A

Mount Magnet Landfill

