



Application for Licence

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

Licence Number	L9297/2021/1
Applicant	Paddington Gold Pty Ltd
ACN	008 585 886
File number	DER2021/000246
Premises	Golden Funnel Project Within Mining tenements M24/102, M24/796, M24/708, M24/166, M24/155, M24/265 and M24/304 City of Kalgoorlie-Boulder As defined by the coordinates in Schedule 1 of the Licence
Date of report	22 September 2021
Decision	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 decision report documents the assessment of potential risks to the environment and public health from emissions and discharges during the operation of the premises. As a result of this assessment, licence L9297/2021/1 has been granted.

2. Scope of assessment

2.1 Regulatory framework

In completing the assessment documented in this decision report, the Department of Water and Environmental Regulation (the department; DWER) 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 premises

On 29 April 2021, Paddington Gold Ltd (the applicant) submitted an application for a licence to the department under section 57 of the *Environmental Protection Act 1986* (EP Act).

The application is to seek a licence relating to category 6 dewatering activities at the Golden Funnel Project (the premises). It is proposed that the mine dewater from Golden Funnel pit and Golden Funnel North Pit to be discharged into the Racetrack pit located approximately 2.7km north of the premises (Figure 1). The Golden Funnel project is approximately 28 km north-west of Kalgoorlie.

The premises relates Category 6 and the assessed production capacity under Schedule 1 of the *Environmental Protection Regulations 1987* (EP Regulations) which are defined in licence L9297/2021/1. The infrastructure and equipment relating to the premises category and any associated activities which the department has considered in line with *Guideline: Risk Assessments* (DWER 2020) are outlined in licence L9297/2021/1.

2.3 Proposed Activities

The applicant anticipates that approximately 1,400,000kL to 1,800,000kL will be discharged into the Racetrack pit during an annual period. In light of that, the applicant seeks approval to discharge 1,900,000 kL (2,500,000 tonnes) per annum, which equates to the design capacity of the pumping and pipeline infrastructure at a discharge rate of 60.2 L/s. The racetrack pit has an estimated capacity of 6,000,000kL, which is adequate to contain the proposed dewater volumes.

A dewatering pipeline (110mm HDPE) to the Racetrack pit has been constructed under Works Approval W6424/2020/1. The mine dewater abstraction point is located at the north-eastern corner of the Golden Funnel North pit. The pipeline is located within earthen v-drain and runs across the southern edge of the run of mine (ROM), across a haulage road and then runs north within the haul road corridor to the Racetrack Pit discharge location (Figure 1). It is anticipated that the mine dewater will be discharged at a rate of 30-60L/sec on a continuous basis (24hrs/day), when mine dewatering operation occurs.

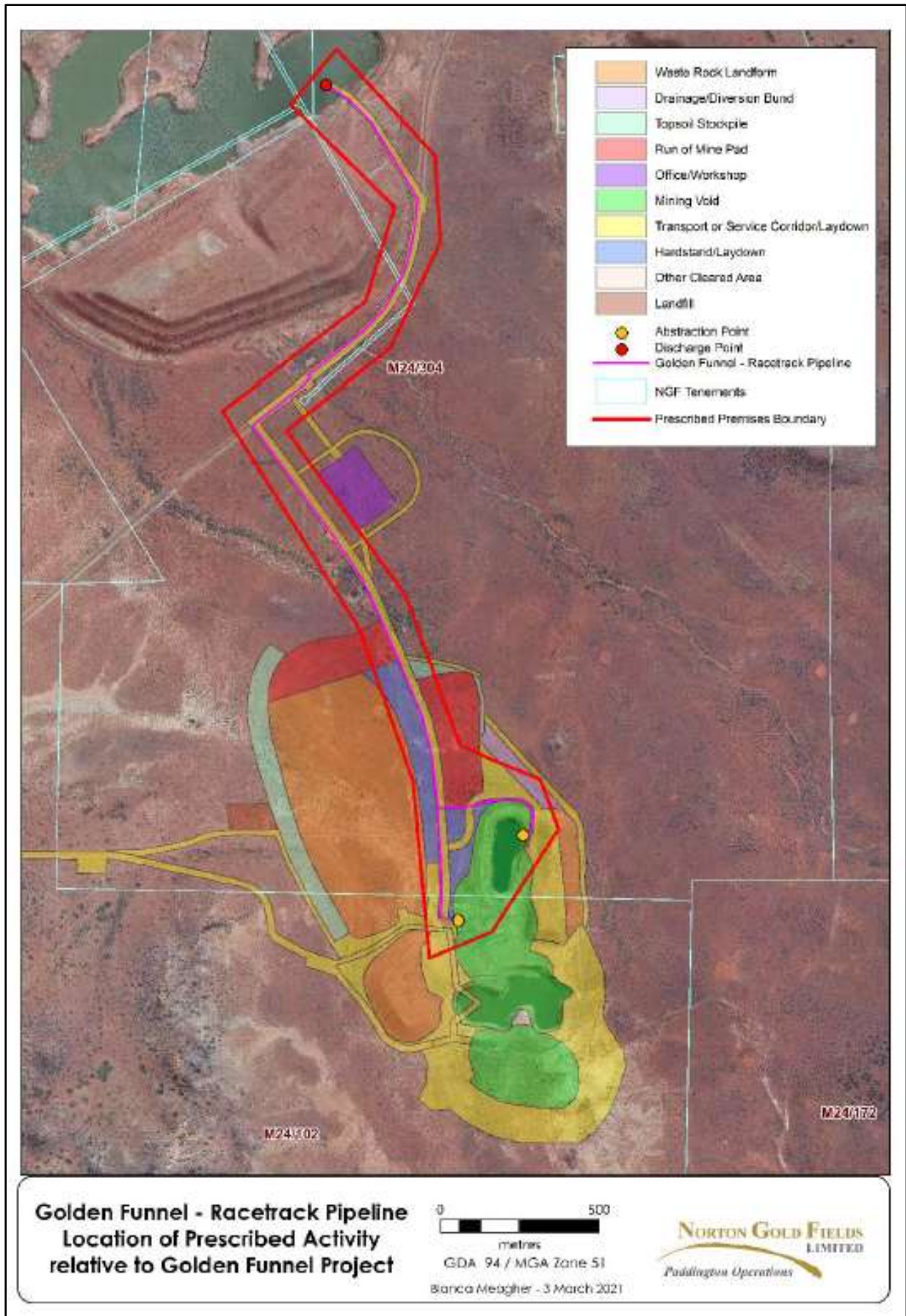


Figure 1: Location of the activity and discharge of the Golden Funnel Project

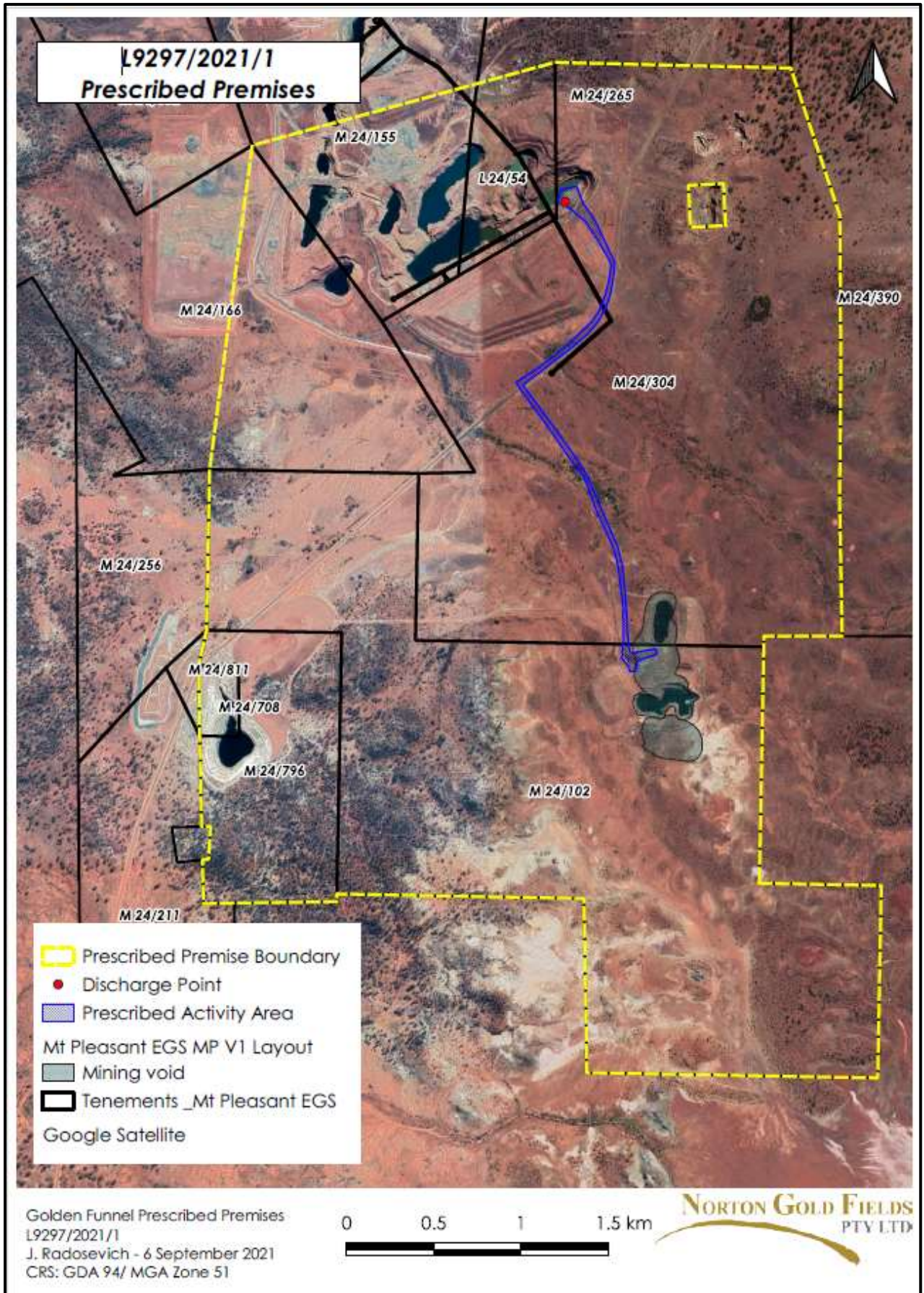


Figure 2: Prescribed Premises Boundary - Golden Funnel Project

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3. Risk assessment

The department assesses the risks of emissions from prescribed premises and identifies the potential source, pathway and impact to receptors in accordance with the *Guideline: Risk Assessments* (DWER 2020).

To establish a risk event there must be an emission, a receptor which may be exposed to that emission through an identified actual or likely pathway, and a potential adverse effect to the receptor from exposure to that emission.

3.1 Source-pathways and receptors

3.1.1 Emissions and controls

The key emissions and associated actual or likely pathway during premises operation which have been considered in this decision report are detailed in Table 1 below. Table 1 also details the control measures the applicant has proposed to assist in controlling these emissions, where necessary.

Table 1: Proposed applicant controls

Emission	Sources	Potential pathways	Proposed controls
Operation			
Dust	Vehicle movement	Air/windborne pathway	<ul style="list-style-type: none"> Dust suppression used on haul roads Visual monitoring of dust within the area
Noise	Pumps and engines Vehicle movements	Air/windborne pathway	<ul style="list-style-type: none"> Regular servicing and maintenance of pumps, breathers, isolation valves and flow meters Managing noise levels below OHS noise levels
Hypersaline water	Rupture of pipelines and dewatering infrastructure	Direct discharge	<ul style="list-style-type: none"> Located within a V-drain in combination with scour pits at strategic locations with sufficient capacity to contain potential spillage over a 12-hour period Isolation and breather valves installed Regular servicing and maintenance of pumps, breathers, isolation valves and flow meters Maintenance and upgrading of bunds, sumps, culverts and scour pits as required 12-hourly pipeline inspections
	Overtopping of Racetrack pit	Direct discharge	<ul style="list-style-type: none"> 6m freeboard to be maintained Development of groundwater management plan to ensure water levels remain less than 6m below surface

Emission	Sources	Potential pathways	Proposed controls
			<ul style="list-style-type: none"> Flow meters installed and measured monthly Monthly surveys of water level in pits
	Mounding of hypersaline groundwater table within the vicinity of the receiving pit	Direct discharge	<ul style="list-style-type: none"> Regular inspections Monthly surveys of water level in pits Annual Groundwater Monitoring Summary
Hydrocarbons	Equipment/machinery and vehicles	Direct discharge	<ul style="list-style-type: none"> Hydrocarbon handling procedures, including storage Hydrocarbon Spill response procedures Small quantities stored on active machinery

3.1.2 Receptors

In accordance with the *Guideline: Risk Assessment* (DWER 2020), the Delegated Officer has excluded the applicant's employees, visitors, and contractors 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 and Figure 3 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
City of Kalgoorlie (the nearest human receptor)	approximately 28 km southeast of the Premises
Environmental receptors	Distance from prescribed activity
White Flag and Black Flag Lakes (ephemeral hypersaline lakes)	Black Flag and White Flag Lakes are approximately 1.5 - 3 km away from the prescribed premises.
2 x ephemeral creeks	across the prescribed premises flowing towards White Flag and Black Flag Lakes
<i>Rights In Water and Irrigation Act 1914</i> proclaimed Groundwater Area	Goldfields Groundwater Area intersects the prescribed premises
Groundwater	Groundwater in the region is generally saline to hypersaline with TDS content generally around 100,000 mg/L.
Other receptors	Distance from prescribed activity
Pastoral dam (inactive)	Between Natal and Racetrack pits (Figure 2): <ul style="list-style-type: none"> 2.3km north-east of Natal Pit

- 1.0km south of Racetrack Pit
- Approval for construction and operation near inactive pastoral dams granted by Black Flag Pastoral Station owners.

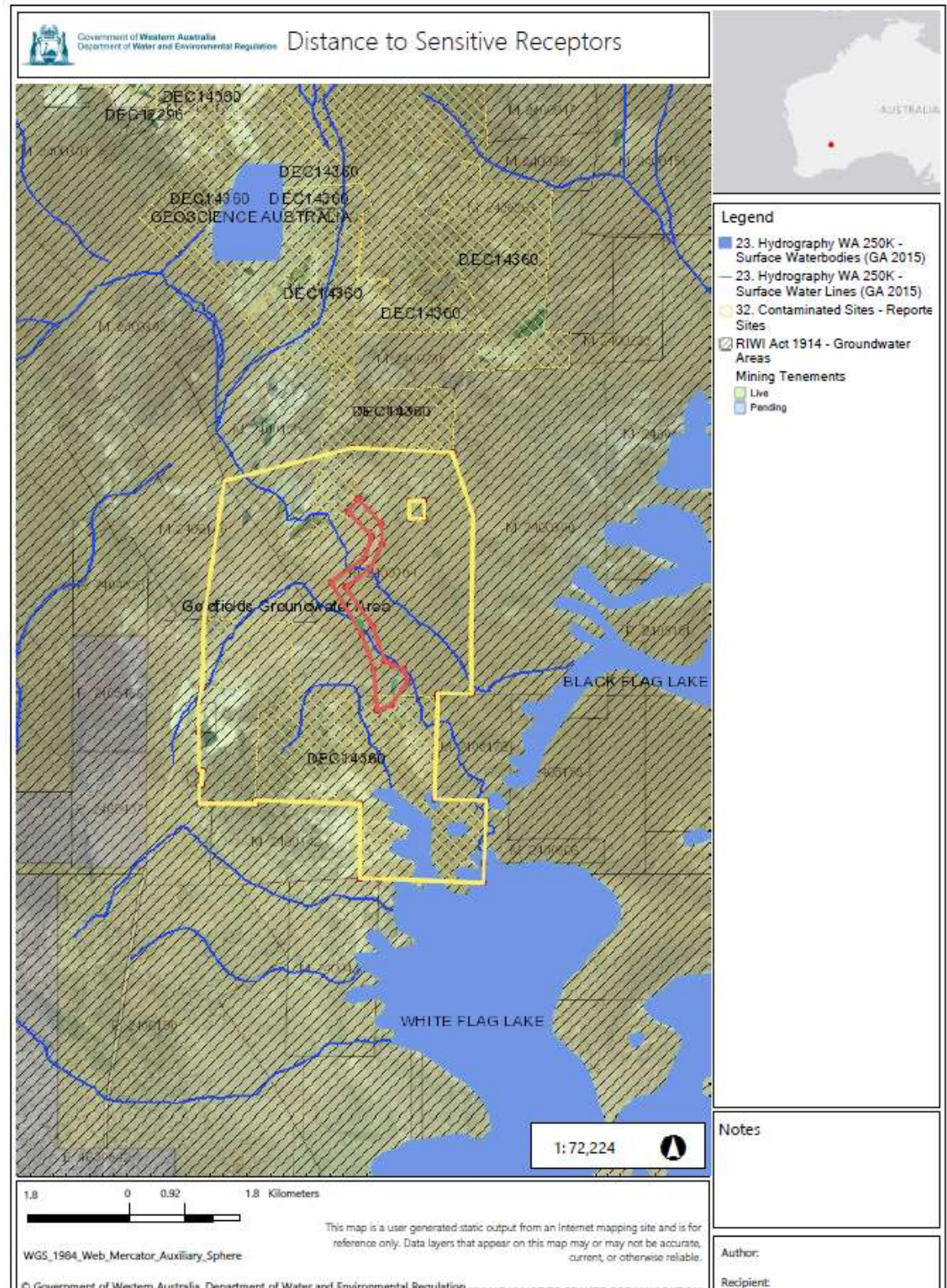


Figure 3: Distance to sensitive receptors

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3.2 Risk ratings

Risk ratings have been assessed in accordance with the *Guideline: Risk Assessments* (DWER 2020) for each identified emission source 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 applicant 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 applicant'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 applicant's controls are not deemed sufficient. Where this is the case the need for additional controls will be documented and justified in Table 3.

Licence L9297/2021/1 that accompanies this decision report authorises emissions associated with the operation of the premises i.e., Category 6 dewatering activities.

The conditions in the issued licence, as outlined in Table 3 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 events					Risk rating ¹	Applicant controls sufficient?	Conditions ² of licence	Justification for additional regulatory controls
Sources / activities	Potential emission	Potential pathways and impact	Receptors	Applicant controls	C = consequence L = likelihood			
Operation								
Vehicle movement	Dust	Air/windborne pathway causing impacts to the vegetation	Native vegetation	Refer to Section 3.1	C = Slight L = Unlikely Low Risk	Y	N/A	N/A
Pumps and engines Vehicle movements	Noise	Air/windborne pathway	No pathway to human receptors due to substantial separation distance	Refer to Section 3.1	N/A	Y	N/A	N/A
Pipelines and dewatering infrastructure	Rupture of pipeline causing hypersaline discharge to land	Direct discharge, causing soil contamination, impacts to the health and condition of native vegetation	Native vegetation Soil	Refer to Section 3.1	C = Moderate L = Unlikely Medium Risk	Y	Condition 1 (operational requirements) Condition 3 (clean-up of saline water spills / leaks)	The Delegated Officer considers that the applicant controls, summarised in section 3.1 to prevent pipeline rupture and potential damage to native vegetation are sufficient to mitigate any potential impacts. These controls have been conditioned within the licence.
Discharge to Racetrack pit	Mounding of hypersaline groundwater table within the vicinity of the receiving pit.	Lateral movement of hypersaline pit lake water through pit walls, leading to mounding of hypersaline groundwater into the root zone of the surrounding native vegetation, causing stress or death. Topsoil contamination could also occur.	Native vegetation Soil	Refer to Section 3.1	C = Minor L = Possible Medium Risk	Y	Condition 1 (operational requirements) Condition 2 (operational requirements) Condition 5 (monitoring)	The Delegated Officer considers that the applicant controls are adequate to manage any potential impacts and these controls have been conditioned on the licence. Additional regulatory controls are not required. Proposed monitoring requirements have placed under Condition 5 to track water levels and quality.
	Overtopping of pit hypersaline water	Direct discharge, causing soil contamination, impacts to the health and condition of native vegetation	Native vegetation Soil	Refer to Section 3.1	C = Moderate L = Unlikely Medium Risk	Y	Condition 1 (operational requirements) Condition 2 (inspection requirements) Condition 5 (monitoring)	

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

Note 2: Proposed applicant controls are depicted by standard text. **Underline text** depicts additional regulatory controls imposed by department.

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4. Consultation

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

Table 4: Consultation

Consultation method	Comments received	Department response
Application advertised on the department's website on 18 June 2021	None received.	N/A
Local Government Authority advised of proposal on 17 June 2021	Comments received on 24 June 2021. City of Kalgoorlie- Boulder has no objections on the proposed licence.	N/A
Department of Mines, Industry Regulation and Safety (DMIRS) advised of proposal 17 June 2021	Comments received on 29 June 2021. Application appears to be consistent with mining proposals approved by DMIRS. DMIRS has no concerns regarding the licence application and would recommend DWER remind Paddington Gold Pty Ltd to ensure all activities are approved under the <i>Mining Act 1978</i> prior to undertaking the works.	DWER has considered these comments when drafting the decision report. Paddington Gold Ltd is required to obtain all the relevant approval under the <i>Mining Act 1978</i> to continue dewatering operation at the Golden Funnel project.
Applicant was provided with draft documents on 9 September 2021	Comments received on 14 September 2021. Refer to Appendix 1	Refer to Appendix 1

5. Conclusion

Based on the assessment in this decision report, the delegated officer has determined that a licence will be granted, subject to conditions commensurate with the determined controls and necessary for administration and reporting requirements.

References

1. Email titled “Application - New Licence - Existing W6424 - Paddington Gold Pty Ltd - Golden Funnel - Dewatering Infrastructure” dated 29/04/2021 authored by Jessica Radosevich, available at DWER records (DWERDT444919).
2. DER 2015, *Guidance Statement: Setting Conditions*, Perth, Western Australia.
3. Department of Water and Environmental Regulation (DWER) 2019, *Guideline: Decision Making*, Joondalup, Western Australia.
4. DWER 2016, *Guideline: Environmental siting*, Joondalup, Western Australia.
5. DWER 2017, *Guideline: Risk assessments*, Joondalup, Western Australia.

Appendix 1: Summary of applicant's comments on risk assessment and draft conditions

Condition	Summary of applicant's comment	Department's response
Condition 2	<p>Licence holder requested that the visual inspection to be performed only when discharge is actively occurring as mentioned below.</p> <p>"The licence holder must undertake visual inspections of the infrastructure as specified in Table 2 <i>when discharge is actively occurring</i> and maintain a written log of each inspection signed by the responsible person."</p>	Requested amendment to the condition is acceptable and Condition 2 has been updated accordingly.
Condition 4	<p>Licence holder requested an amendment to condition 4 as mentioned below. The management actions for any spill of environmentally hazardous material are only proposed if occurring outside of an engineered containment.</p> <p>"The licence holder shall immediately recover, or remove and dispose of, <i>or rehabilitate areas impacted by</i>, spills of environmentally hazardous materials including saline water, whether inside or outside an engineered containment system."</p>	The proposed amendment to the condition is acceptable in light of the other management controls proposed and conditioned in the licence to prevent any potential spills as well as monitoring conditions imposed in the licence.
Condition 5 Table 4	The licence holder requested that the Total Dissolve Solids to be monitored in-field using non-NATA accredited analysis. Also requested to amend the footnote 2 of the Table 4 to omit the clause "during that month", which means that the emissions and discharge monitoring to be done only when dewatering is actively occurring.	Requested amendment to condition 5 is acceptable and Table 4 has been updated accordingly.

Appendix 2: Application validation summary

SECTION 1: APPLICATION SUMMARY (as updated from validation checklist)									
Application type									
Works approval	<input type="checkbox"/>								
Licence	<input checked="" type="checkbox"/>	Relevant works approval number:	W6424/2020/1	None	<input type="checkbox"/>				
		Has the works approval been complied with? (A1971595)		Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>		
		Has time limited operations under the works approval demonstrated acceptable operations?		Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	N/A	<input type="checkbox"/>
		Environmental Compliance Report submitted?		Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>		
		Date Report received: 01 January 2021							
Renewal	<input type="checkbox"/>	Current licence number:							
Amendment to works approval	<input type="checkbox"/>	Current works approval number:							
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		29 April 2021							
Applicant and Premises details									
Applicant name/s (full legal name/s)		Paddington Gold Pty Ltd							
Premises name		Golden Funnel							
Premises location		Within Mining tenements M24/102 and M24/304							
Local Government Authority		City of Kalgoorlie-Boulder							
Application documents									
HPCM file reference number:		DER2021/000246							
Key application documents (additional to application form):		Attachment 1A Proof of occupier status Attachment 1B ASIC company extract Attachment 3B Licence Application Golden Funnel Racetrack Attachment 3B Appendices Attachment 7 Locality Map Attachment 9 Proposed fee calculation							
Scope of application/assessment									
Summary of proposed activities or changes to existing operations.		<i>Licence</i> Operation of mine dewatering							

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 6: Mine dewatering premises on which water is extracted and discharged into the environment to allow mining of ore.	1,900,000 tonnes per year	N/A

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: N/A 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: N/A
Has the proposal been referred and/or assessed under the EPBC Act?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Reference No: N/A
Has the applicant demonstrated occupancy (proof of occupier status)?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Certificate of title <input type="checkbox"/> General lease <input type="checkbox"/> Expiry: Mining lease / tenement <input checked="" type="checkbox"/> Expiry: MINING LEASE 24/102 - 15/12/2028 MINING LEASE 24/304 - 27/03/2032 MINING LEASE 24/708 - 29/12/2020 MINING LEASE 24/796 - 10/04/2024 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? Activities happen within the mining lease. Does not require planning approval 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 checked="" type="checkbox"/> No <input type="checkbox"/>	CPS No: CPS [8784/1]

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: GWL151865(12)
Does the proposal involve a discharge of waste into a designated area (as defined in section 57 of the EP Act)?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Name: RIWI Goldfields groundwater area Type: Has Regulatory Services (Water) been consulted? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input checked="" type="checkbox"/> Regional office: Goldfields Please advise if we need to send an internal memo.
Is the Premises situated in a Public Drinking Water Source Area (PDWSA)?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Name: N/A Priority: 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"/>
Is the Premises subject to any other Acts or subsidiary regulations (e.g. <i>Dangerous Goods Safety Act 2004, Environmental Protection (Controlled Waste) Regulations 2004, State Agreement Act xxxx</i>)	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	<i>Mining Act 1978</i>
Is the Premises within an Environmental Protection Policy (EPP) Area?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	N/A
Is the Premises subject to any EPP requirements?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	N/A
Is the Premises a known or suspected contaminated site under the <i>Contaminated Sites Act 2003</i> ?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Classification: Possibly contaminated – investigation required (PC–IR) Date of classification: 20/2/2020