



Application for Works Approval Amendment

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

Works Approval Number	W6244/2019/1
Works Approval Holder	Paddington Gold Pty Ltd
ACN	008 585 886
File Number	DER2018/001042-3~95
Premises	Golden Cities (Mulgarrie) Mining tenements M24/564, M24/565, M24/616, M27/185, L24/231 As defined by the Premises maps attached to the Revised Works Approval
Date of Report	4 January 2021
Decision	Revised works approval granted

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A/MANAGER – RESOURCE INDUSTRIES

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

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1. Decision summary

Works approval W6244/2019/1 is held by Paddington Gold Pty Ltd (Paddington Gold - works approval holder) for the Golden Cities (Mulgarrie) (the Premises), located at mining tenements M24/564, M24/565, M24/616, M27/185 and L24/231.

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, a revised works approval W6244/2019/1 has been granted.

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

2. Scope of assessment

2.1 Regulatory framework

In completing the assessment documented in this amendment report, the department has considered and given due regard to its regulatory framework and relevant policy documents which are available at <https://dwer.wa.gov.au/regulatory-documents>.

2.2 Application summary

On 7 September 2020, the works approval holder submitted an application to the department to amend Works Approval W6244/2019/1 under section 59 and 59B of the *Environmental Protection Act 1986* (EP Act).

The works approval holder seeks to construct an additional 8km pipeline alongside the Poseidon Nickel pipeline already approved for use under W6244/2019/1 to help facilitate dewatering to the Mulgarrie Pit, also approved under W6244/2019/1.

Black Swan Nickel (project now operated by Poseidon Nickel) gained access to the Federal pit on 20 October 2005 to use water for their processing plant under a separate groundwater and environmental licence held by them (L6933/1996/14).

The works approval holder has completed one section of pipeline (stage 1 - Federal pit to Havana pit) approved under W6244/2019/1. The works approval holder advised that this segment was constructed along a slightly different route to that originally approved (Figure 1). The works approval holder proposes to modify the locations of pipeline segments which have yet to be constructed (stages 2 - 3). Paddington Gold have proposed a staged construction and commissioning approach to remaining pipeline segments (Figure 1), including the additional pipeline proposed for this amendment (stage 4).

Paddington Gold is not applying for an increase of throughput associated with dewatering.

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. Given the low risk and minor nature of the amendment stakeholder consultation was not undertaken by the department.

3.1 Source-pathways and receptors

3.1.1 Emissions and controls

The key emissions and associated actual or likely pathways during construction and operation have been considered in this Amendment Report and are detailed in

Table 1 below.

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

Table 1: Works Approval Holder controls

Emission	Sources	Potential pathways	Proposed controls
Dust	Construction and installation of dewatering pipelines	Air/windborne pathway	Use of water carts to control dust – applied at low pressure with dribble bars to prevent overspray onto vegetation and topsoil stockpiles.
Noise	Construction and installation of dewatering pipelines	Air/windborne pathway	Not listed in existing works approval conditions. The applicant has listed “if required, place noise barrier around pump”
Hypersaline mine dewater	Operation of dewatering pipelines (dewater from Mulgarrie pit)	Direct discharge to land	<u>Existing works approval conditions:</u> Installation of pipelines within scour pits and v-drains. 12 hourly inspections of pipelines, v-drains, scour pits Leak detection Pipelines constructed by Australian standards: <ul style="list-style-type: none">• AS/NZS 2033:3008• AS/NZS 4129:2008• AS/NZS 4130:2009• AS/NZS 4131:2010

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 Works Approval Holder’s from its assessment. Protection of these parties often involves different exposure risks and prevention strategies, and is provided for under other state legislation.

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)). The closest town is Broad Arrow, 12km west of the premises. The Delegated Officer considers that given the distance of the premises, it is unlikely that any identified risk event would impact this receptor. As such, the risk is not considered to be significant enough to warrant further assessment.

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

Environmental receptors	Distance from prescribed activity
Five threatened fauna species and five migratory species occurring within the project area following a targeted fauna and mallefowl survey in 2017 22 malleefowl mounds identified within the project area.	Within the site premises (see Figure 1)

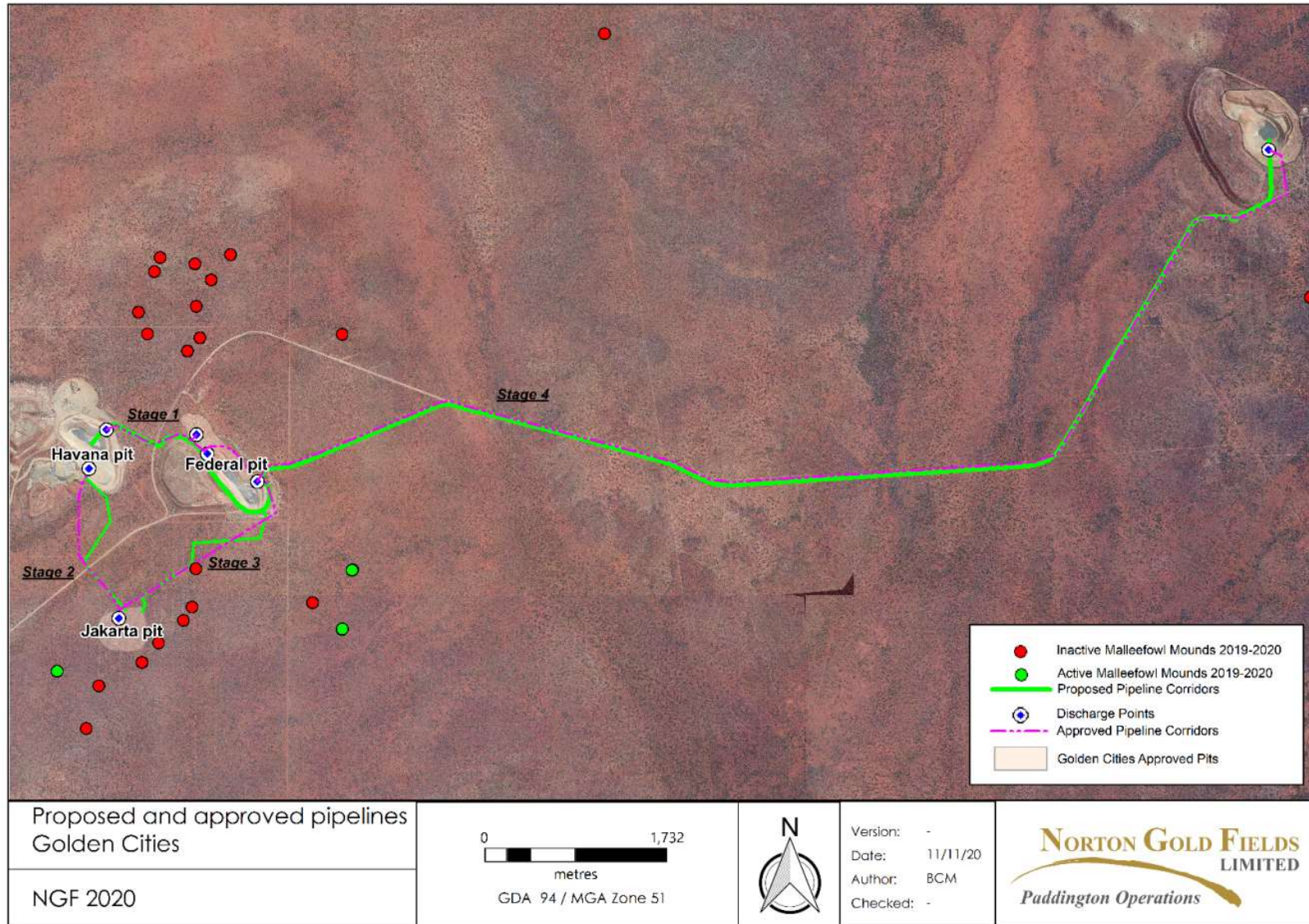


Figure 1: Distance of approved pipeline (original W6244/20191) and proposed pipeline to Malleefowl mounds

4. 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 Works Approval Holder has proposed mitigation measures/controls (as detailed in Section 3.1), these have been considered when determining the final risk rating. Where the Delegated Officer considers the Works Approval Holder's proposed controls to be critical to maintaining an acceptable level of risk, these will be incorporated into the Works Approval as regulatory controls.

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

The Revised Works Approval W6244/2019/1 that accompanies this Amendment Report authorises construction and time-limited operations. The conditions in the Revised Works Approval have been determined in accordance with *Guidance Statement: Setting Conditions* (DER 2015).

A licence is required following the time-limited operational phase authorised under the works approval to authorise emissions associated with the ongoing operation of the Premises i.e. category 6 activities. A risk assessment for the operational phase has been included in this Amendment Report, however licence conditions will not be finalised until the department assesses the licence application.

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

Risk Event					Risk rating ¹ C = consequence L = likelihood	Conditions ² of works approval	Justification for additional regulatory controls
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Works Approval Holder's controls			
Construction							
Construction and installation of dewatering pipelines	Dust	Air/windborne pathway causing impact to vegetation	Native vegetation and Malleefowl within premises.	Refer to Section 3.1	C = Slight L = Unlikely Low	Given short construction timeframe, any dust impact to vegetation is expected to be minimal.	N/A
Commissioning and operation (including time-limited operations)							
New pipelines and dewatering infrastructure (breach)	Rupture of pipeline causing hypersaline discharge to land	Direct discharge onto soil and native vegetation causing topsoil contamination and plant stress or death. Associated potential to impact Malleefowl within the premises.	Native vegetation and Malleefowl within premises.	Refer to Section 3.1	C = Moderate L = Possible Medium	<u>Modification to existing conditions:</u> Condition 3 (construction requirements) Condition 5 (commissioning) <u>New condition</u> Condition 4 (staged construction)	Amendment to the location of pipeline stages 2 and 3, and the additional proposed pipeline (stage 4) do not pose significant additional risk to vegetation or malleefowl mounds identified. Modification of existing construction and commissioning requirements within the works approval to include the new pipeline is considered sufficient. Paddington Gold has submitted compliance and commissioning reports for stage one section of pipeline. Remaining segments have yet to be constructed. Condition 4 has been added and conditions 3 and 5 modified to reflect a staged construction and commissioning approach for separate pipeline segments.

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

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

5. Conclusion

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

5.1 Summary of amendments

Table 4 provides a summary of the proposed amendments and will act as record of implemented changes. All proposed changes have been incorporated into the Revised Works Approval as part of the amendment process.

Table 4: Summary of works approval amendments

Condition no.	Proposed amendments
-	The revised works approval has been granted in a new format.
1	Table reference updated Scour pit construction requirements modified.
2	Table reference updated
3	Table reference updated. Updated to include a requirement for environmental compliance reporting for separate stages of dewatering pipeline construction.
4 (new)	New condition to reflect staged construction and commissioning of dewatering pipelines
4 (former)	Renumbered to condition 5 Updated to reflect staged construction and commissioning of dewatering pipelines
5 to 7 (former)	Renumbered to conditions 6 – 8
8 (former)	Renumbered to condition 9 Wording modified to reflect the requirement for a licence update (as opposed to granting a new licence) post time-limited operations.
10 (former)	Removed from works approval – redundant, addressed in “Discharge of Mine Water” condition
-	A definition of ‘qualified professional engineer’ has been included to the Definitions Table
Schedule 1	Inclusion of revised maps to reflect modified locations for pipeline segments (existing works approval) and additional proposed pipelines
Schedule 2	Updated reference to Table and Figure numbers
Schedule 3	Removed. All figures are now included within Schedule 1.

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. Paddington Gold Pty Ltd, 2020. Application and Supporting Documentation DWER reference A1931069
5. Poseidon Nickel and Paddington Gold Federal Pit access agreement DWER reference A1962742

Appendix 1: Summary of Works Approval Holder's comments on risk assessment and draft conditions

Condition	Summary of Works Approval Holder's comment	Department's response
Table 1	Request to modify condition in Table 1 requiring scour pits to be constructed at 500m intervals to "scour pits will be constructed along the pipeline route at strategic locations and low points".	The condition will be modified, however as per the remaining condition in Table 1, the v-drains and scour pits in combination must have sufficient capacity to completely contain any spills from pipeline leakage or breach for a period equal to the time between routine inspections. The Works Approval Holder must provide evidence of such capacity within the Environmental Compliance Report as required by condition 2.

Appendix 2: Application validation summary

SECTION 1: APPLICATION SUMMARY					
Application type					
Works approval	<input checked="" 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 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		7/9/2020			
Applicant and Premises details					
Applicant name/s (full legal name/s)		Paddington Gold Pty Ltd			
Premises name		Mulgarrie			
Premises location		M24/564, M24/565, M24/616, M27/185, L24/231			
Local Government Authority		City of Kalgoorlie-Boulder			
Application documents					
HPCM file reference number:		DER2018/001042-3~95			
Key application documents (additional to application form):		Malleefowl Risk Assessment for Golden Cities (previous WA) Flora Survey for Golden Cities Annual Malleefowl Survey Report Mulgarrie Flora and Fauna Report Norton Autumn Flora Report			
Scope of application/assessment					

Summary of proposed activities or changes to existing operations.	<p>Works approval</p> <p>Construction of a separate dewatering corridor to allow abstraction/dewatering activities to operate separate to those undertaken by Poseidon Nickel. Note that its unclear where these corridors will be in relation to existing corridors approved under W6244.</p> <p>Increased nominated throughput to all pits (currently approved under W6244) will be >500,000kL per annum</p>	
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	4,000,000kL	No changes to production/design capacity proposed
Legislative context and other approvals		
Has the applicant referred, or do they intend to refer, their proposal to the EPA under Part IV of the EP Act as a 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 type="checkbox"/> Expiry: Other evidence <input type="checkbox"/> Expiry:
Has the applicant obtained all relevant planning approvals?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>	Approval: Expiry date: If N/A explain why? Covered within Mining Proposal and under the Mining Act
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: 8772/1 granted March 2020
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: GWL167868(4)
Does the proposal involve a discharge of waste into a designated area (as defined in section 57 of the EP Act)?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Name: RIWI goldfields groundwater area Type: Has Regulatory Services (Water) been consulted? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Regional office: Goldfields
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: P1 / P2 / P3 / 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 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</i> <i>Dangerous Goods Act</i> <i>Controlled Waste Regulations</i>
Is the Premises within an Environmental Protection Policy (EPP) Area?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Is the Premises subject to any EPP requirements?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Is the Premises a known or suspected contaminated site under the <i>Contaminated Sites Act 2003</i> ?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Classification: "Report not substantiated" 20 February 2020 (not enough information to indicate that the site could be contaminated). Date of classification: