Application for Works Approval

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

Works Approval Number	W6585/2021/1
Applicant	Black Cat (Bulong) Pty Ltd
ACN	620 898 044
File number	DER2021/000439
Premises	Imperial Majestic Mine M25/350 As defined by the premises maps attached to the issued works approval
Date of report	13 December 2021
Decision	Works approval granted

Lauren Edmands
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Lauren Edmands
MANAGER – RESOURCE INDUSTRIES
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 construction and operation of the premises. As a result of this assessment, works approval W6585/2021/1 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 3 August 2021, Black Cat (Bulong) Pty Ltd (Black Cat, the applicant) applied for a works approval to the department under section 54 of the *Environmental Protection Act 1986* (EP Act).

The application is to undertake construction and time limited operations relating to category 5 (processing and beneficiation of metallic or non-metallic ore) and category 6 (dewatering) activities at the premises. The proposed works include construction and time limited operations for the following:

- a conventional crush – grind – gravity / carbon-in-leach (CIL) recovery processing plant with a target throughput to process 800,000 tonnes per annum of gold ore;
- a process water pond and diesel power station (8MW provided by diesel generators)
- a two cell paddock style tailings storage facility (TSF), and associated infrastructure, designed to store 2Mt of tailings, and
- construction of a dewatering pipeline and discharge of mine dewater from the Majestic pit to the Imperial pit.

The project duration is anticipated to be four years. The premises is approximately 45 km south east of Kalgoorlie.

The premises relates to the categories and assessed design capacity under Schedule 1 of the *Environmental Protection Regulations 1987* (EP Regulations) which are defined in works approval W6585/2021/1. 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 works approval W6585/2021/1.

An overview of proposed works is outlined below.

2.2.1 Existing infrastructure

The Imperial-Majestic Project was mined by previous occupier Silver Lake Resources between 2016 - 2018. Black Cat purchased the tenement package containing the Imperial-Majestic Gold Deposit (mining tenement M25/350) in July 2020. The premises currently consists of three open pits: the Imperial, Majestic and Majestic West pits (Figure 1). Under previous operations, mined ore was transported off site for further processing and mine dewater was transferred via a pipeline to a neighbouring tenement for discharge into Fingals Pit (as per the conditions specified in Licence L8457/2012/2, held by Silver Lake [Integra] Pty Limited). When previous mining ceased within the Majestic and Imperial pits in 2018, dewatering also ceased which allowed both pits to recharge with groundwater.

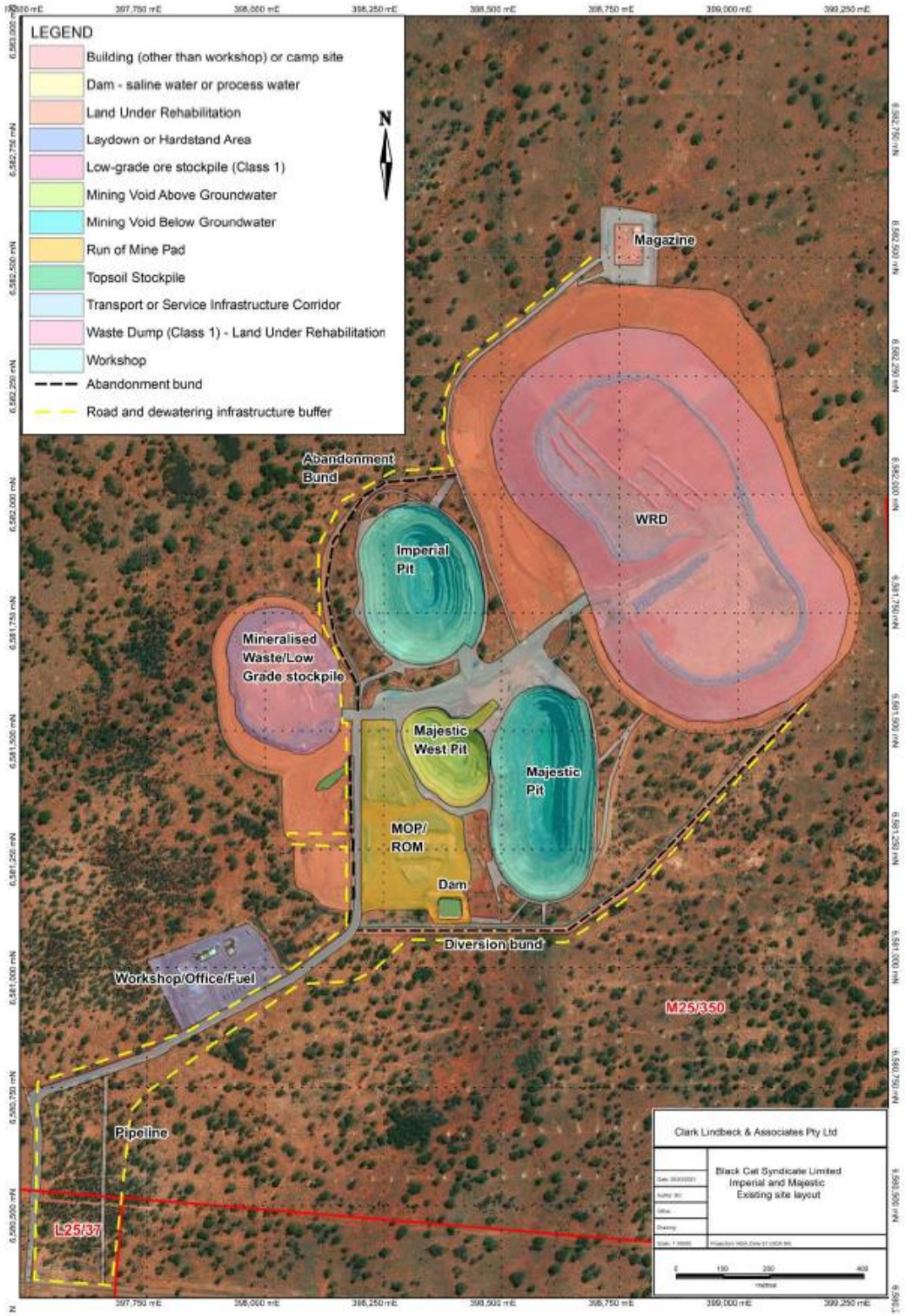

Figure 1: Existing site infrastructure

2.2.2 Description of proposed activity

The applicant intends to recommence mining activities at the premises, which includes dewatering of the existing pit lake from the Majestic Pit into the Imperial pit, mining of the Majestic Pit, and construction of a new processing plant, a new tailings storage facility and associated infrastructure (Figure 2). The applicant does not intend to mine the Majestic West Pit, but intends to deposit waste material generated from the underground mines. This activity

is approved by DMIRS under the currently approved mining proposal (registration ID 93469).

Processing Plant

The Processing Plant is proposed to operate 24 hours a day, 7 days a week, with gold to be removed from ore by conventional carbon-in-leach (CIL) processing. A high-density polyethylene (HDPE) 1.5mm lined process water pond is proposed for installation, 34 m x 45 m dimension, 2.5 m depth with a capacity of 3,825m^3. The HDPE liner will be laid on a compacted clay base. The process water pond will be maintained with a minimum freeboard of 300mm and designed to contain a one in one hundred-year 72 hours average recurrence interval (ARI) rainfall event.

The site will be powered by an 8 MW diesel generator.

Surface water run-off (rainfall) from the process plant will be collected and directed to a stormwater dam. The proposed stormwater dam will have the following specifications:

- Designed to account for a 1% (1 in 100-year event) AEP 72-hour event, with a provision for 65mm freeboard following filling of water from the design storm event;
- Dimensions 65 m x 230 m (top of inside wall), 4 m deep (base to wall), 3 m deep to spillway (which allows for a nominal allowance for sediment build up). The applicant will conduct an annual survey of capacity to monitor sediment build up and maintain the original design volume.
- Compacted clay base and designed to received clean surface water run-off only.

Water captured in this pond will be removed using one of the following options:

- Re-used in the process by directing to the raw water tank or process water pond
- Discharged to dewatering location Imperial Pit, or
- Clean water/rainwater will be discharged to the environment via an engineered spillway and directed through an existing natural drainage line.

Tailings storage facility (TSF)

The proposed TSF will comprise two paddock (cell) style, rectangular facilities, constructed in a single stage (starter embankment). Each cell will be designed to store 1 Mt of tailings over 3.5 years (Table 1) (2 Mt for both cells). The TSF will be located 550 m northwest of the plant site (Figure 2), and the two cells will have a combined footprint of 46 ha. As the life of mine is expected to be a minimum of four years, the applicant intends to expand the TSF as part of a separate application to be submitted to DWER at a later date.

It is noted that in some of the application documents, the different cells are referred to as “TSF1 and TSF2”, this decision report and the associated works approval will refer to both cells as the TSF with cells 1 and 2.

For further detail on TSF construction, seepage management, tailings characterisation and DWER regulatory controls, see Appendix 1.

Table 1 Estimated TSF storage capacity embankment/crest height

Stage	Final embankment height	Crest RL (m AHD)	Est. storage capacity (t)
Starter embankment Cell 1	9 m	348.5	1,000,000
Starter embankment Cell 2	9 m	345.5	1,000,000

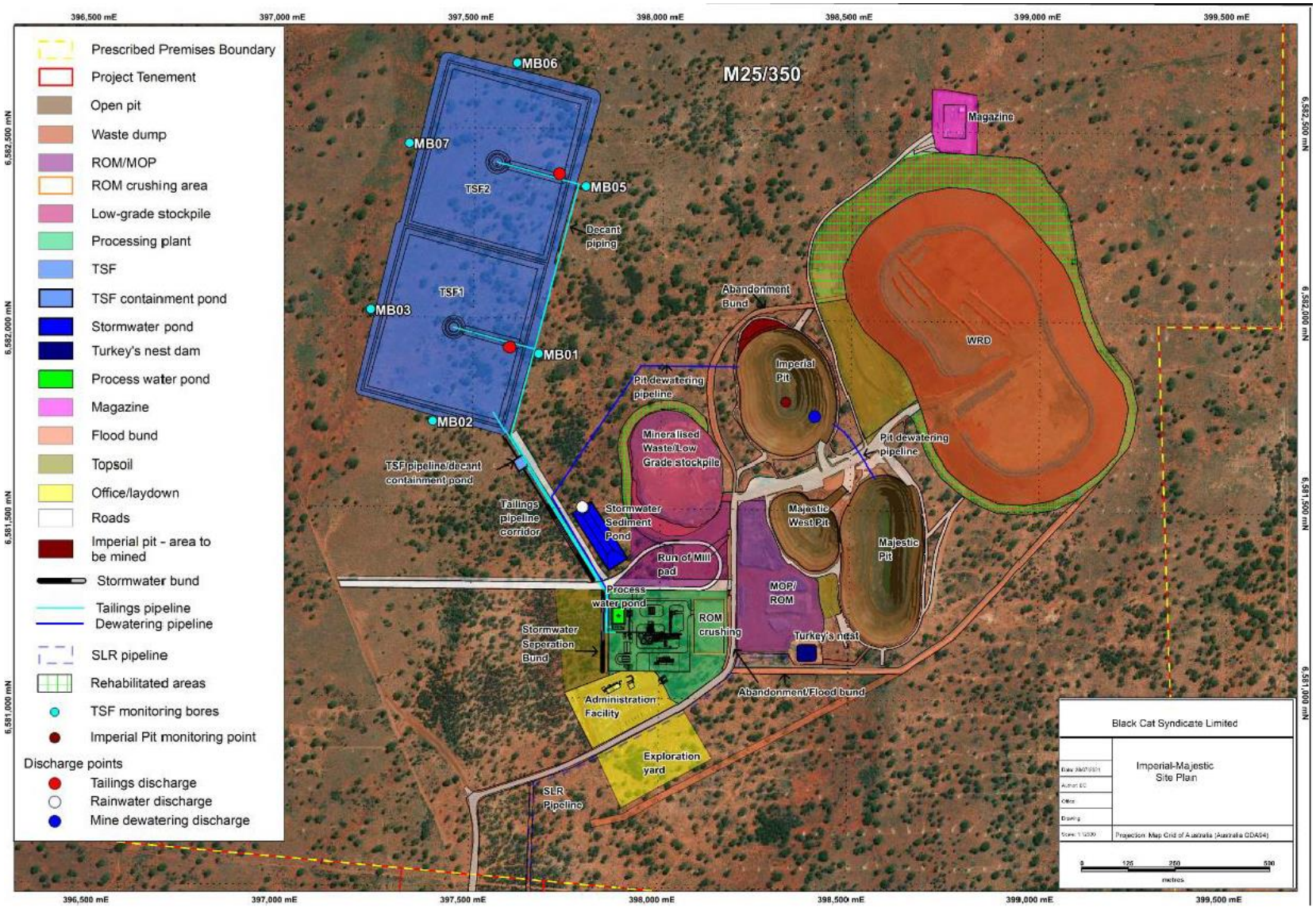

Figure 2: Proposed site infrastructure

Dewatering

The applicant is proposing to discharge mine dewater from the Majestic pit to the Imperial pit to allow for mining activities. As of August 2021, the Majestic pit contained 790,000 kL of water and has a calculated groundwater inflow of 1,043 kL/day. The Imperial Pit Lake contained 193,000 kL. The applicant indicates that based on historic mine dewatering records and consultant GRM 2018 flow modelling, approximately 900,000 kL of water will be transferred from Majestic to the Imperial Pit. The applicant is intending to pump water from Majestic Pit to Imperial Pit over a 4 month period at a nominal flow rate of 120 L/s.

Following dewatering of the Majestic Pit lake to Imperial the water level in Imperial will be at the 305 mRL, with approximately 35 m freeboard to the pit crest.

Water from Imperial will then be pumped to the process water pond for use in the processing facility at a rate of ~18 L/s. Flow modelling by Black Cat indicates the Imperial pit lake can sustain an 800,000 tpa process facility for approximately 7 years (assuming 30% water return from the TSF). The applicant states that given the volume of water accessible from dewatering, the backup borefield is unlikely to be required over the life of mill schedule. However, the applicant indicates that the processing plant has been designed to be upgraded to 1.5 Mtpa (which would be subject to the appropriate licence amendments). In this scenario the water demand would increase from 18 L/s to 33 L/s. At a throughput of 1.5 Mtpa the combined Imperial and Majestic pit lake would be dewatered in approximately 1.25 years.

The applicant holds groundwater licence GWL176418(4) to allow for abstraction of 700,000 kL/annum for the purposes of dewatering and dust suppression.

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 construction and operation which have been considered in this decision report are detailed in Table 2 below. Table 2 also details the control measures the applicant has proposed to assist in controlling these emissions, where necessary.

Although noise emissions will be generated from the premises during both construction and operation, there are no noise receptors and therefore there will be no risk event associated with noise emissions.

Table 2: Proposed applicant controls

Emission	Sources	Potential pathways	Proposed controls
Construction			
Dust	Construction of: • gold processing plant and associated equipment • tailings storage facility • dewatering pipelines	Air/windborne pathway causing impacts to native vegetation , Majestic Timber Reserve and surface water quality	• Water carts will be used to manage dust during construction if required • Implementation of speed limits for all vehicles. • Dewater will be applied to prevent emissions of dust resulting from excavation and placement of equipment.
Commissioning and time limited operations			
Processing plant and process water pond			
Spills/leaks of process water contaminated with environmentally hazardous materials (metalloids, cyanide, processing plant reagents) Contaminated surface water run-off.	Operation of the Processing Plant	Direct discharge to land potentially causing ecosystem disturbance or impacting soil quality	• Environmentally hazardous material will be stored within bunded areas or containers, with any spills to be cleaned up immediately. • A surface water bund will be installed to divert stormwater away from operational areas.
Dust		Air/windborne pathway causing impacts to native vegetation, Majestic Timber Reserve and surface water quality	• A water truck will be deployed to suppress emissions of fugitive dust when required. • Daily inspection of plant will include a dust assessment and walking of site perimeter.
Water contaminated with environmentally hazardous materials (metalloids, cyanide, processing plant reagents)	Process water pond	Seepage through base and embankments to soil and groundwater	• Process water pond is HDPE lined to prevent leaks.
		Overtopping and direct discharge to land	• Daily inspections will be undertaken to ensure the 300 mm freeboard on the process water pond is maintained.
Contaminated stormwater run-off	Stormwater pond	Seepage through base to soil and	• Compacted clay base, to receive clean surface water

Emission	Sources	Potential pathways	Proposed controls
from processing plant		groundwater	run off only
		Overtopping and direct discharge to land	• designed to account for a 1% (1 in 100-year event) AEP 72 hour event
Tailings storage facility (see Appendix 1 for additional information)			
Tailings and contaminated water (metalloids, cyanide)	Discharge and storage of tailings in the TSF	Seepage through base and embankments of TSF to soil and groundwater	• TSF will have an inner zone of compacted clay borrow materials • A cut-off trench, to nominally 1 m below ground level in the surficial clay layer has been included in the embankment design to reduce horizontal seepage losses • Liberated water will be continually removed from the surface of the tailings • Water will be removed from each cell of the facility and pumped back to the process plant via a 'turret' pump decant system within a central "rock-ring" decant within each TSF cell The water recovery system will have a capacity of ≥ 90tph • Installation of groundwater monitoring well network • Development of a groundwater recovery plan if standing water levels (SWLs) reach 6 mbgl. Limit of 4 mbgl • Decant pond weak acid dissociable cyanide target of 50 mg/L, not to exceed 100mg/L
		Overtopping of TSF and direct discharge to land	• Minimum embankment freeboard of 0.7 m • Installation of freeboard markers • Designed to contain a 1 in 100 year AEP, 72 hour duration storm rainfall event • The minimum capacity of the water recovery system will not be less than 90 tph including the additional capacity to

Emission	Sources	Potential pathways	Proposed controls
			recover water from design storm events.
		Pipeline leak/rupture and direct discharge to land	• Daily inspections of pipeline to detect failures • Pipelines fitted with flow meters and telemetry pressure transmitters to allow remote monitoring and flow control • Tailings pipeline located within bunds to contain spillage/leaks
Dust	Erosion of tailings beaches	Air/windborne pathway	The applicant does not expect dust generation from tailings beaches as they expect the tailings to form a crust (hypersaline) binding the tailings surface and reducing the potential for dust generation If dust generation becomes an issue (i.e. in periods the TSF may be inactive), the tailings beaches could be irrigated (i.e. with sprinklers or similar) or tailings deposition managed such that beach areas do not dry back to such that dust generation occurs.
Dewatering			
Hypersaline mine dewater	Dewatering operations – transfer of hypersaline mine dewater via pipelines	Spills/leaks from pipeline failure leading to uncontrolled discharge to land	• Pipelines between open pits will be laid within a v-drain with the dimensions 1,000 mm wide and 500 mm deep, with any loss of saline water to be directed back into the open pit • The pipeline will be hydrotested prior to commencement of dewatering activities to ensure the pipelines integrity • The water pipelines will be fitted with flow meters for monitoring • Daily inspections of all saline water pipelines will be undertaken • Any release which is likely to cause pollution or environmental harm will be

Emission	Sources	Potential pathways	Proposed controls
			reported to DWER in accordance with section 72 of the EP Act
Hypersaline mine dewater	Dewatering into Imperial pit	Seepage through pit walls to groundwater	The applicant indicates that water sourced from the Imperial Pit will be used as process water in the processing plant. It is indicated that eventually all discharged water will be used and at this time, process water will be supplemented from the bore field See Appendix 2 for further information
		Overtopping of Imperial Pit and direct discharge to land	The Imperial pit has a minimum available storage volume of 1.86 million kL (including 300 mm freeboard at the pit rim), sufficient to store the 900,000 kL which will be discharge there from the Majestic Pit.

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 3 and Figure 1 below provides a summary of potential environmental receptors that may be impacted because of activities upon or emission and discharges from the prescribed premises *(Guideline: Environmental Siting* (DWER 2020)). There are no human receptors likely to be impacted by premises activities. A hydrogeological conceptual site model is presented in Appendix 1.

Table 3: Sensitive environmental receptors and distance from prescribed activity

Environmental receptors	Distance from prescribed activity
Threatened flora *Eremophila arachnoides* subsp. *Tenera* P3 – possibly threatened – species that are known from several locations, and the species does not appear to be under imminent threat. Such species require further survey.	2 km north of the premises boundary (3 km north-west of proposed TSF and 3.8 km north-west of Imperial pit) Given the distance to this receptor, the Delegated Officer considers that a risk event is unlikely and therefore this receptor is not considered further.
Ephemeral salt lakes Lake Yindarlgooda and associated minor un-named lakes and tributaries Associated benthic fauna (Campagna, 2007)	Closest surface water body is 3 km north of premises boundary, down-gradient from the site (4.1 km north-east of proposed TSF and 4.7 km north of Imperial Pit) Given the distance to this receptor, the Delegated Officer considers that a risk event is unlikely and

	therefore this receptor is not considered further. See Appendix 1, section 3 for further discussion.
Ephemeral creek lines	Within and adjacent to the premises boundary
DBCA legislated tenure “Majestic Timber Reserve”	Approximately 400 m south of the Premises boundary (~1.6 km south of proposed area of the TSF and Imperial Pit)
Goldfields Groundwater Area	Premises falls within Goldfields Groundwater Area Groundwater depth near the TSF recorded, from existing monitoring bores, between 17.33 – 19.89 mbgl (CMW, 2021). Groundwater flow direction to the north. Groundwater is hypersaline; TDS ranging 34,600 – 84,000 mg/L (CMW, 2021)
Native vegetation	Adjacent to proposed works, within the premises boundary

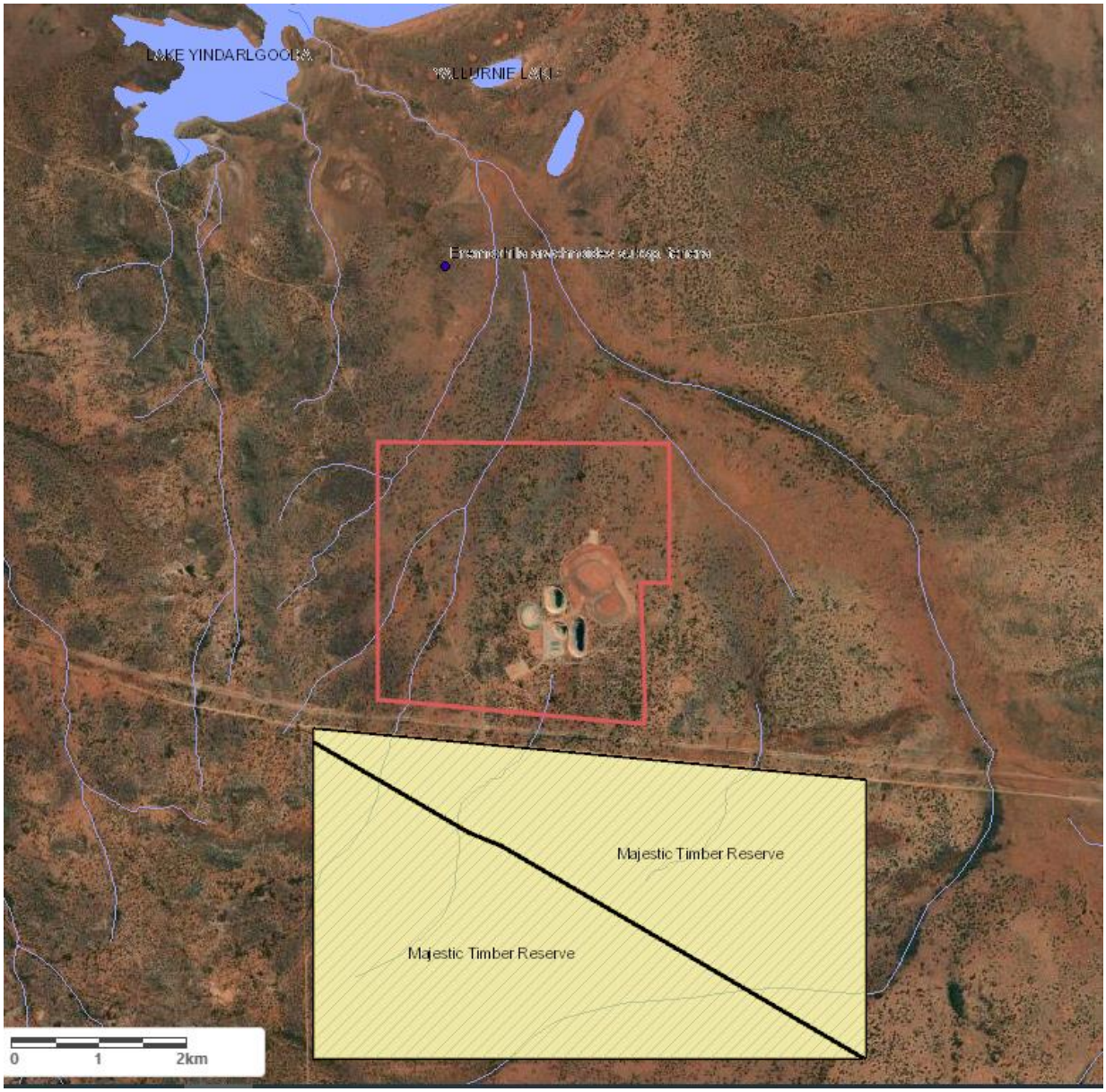

Figure 3: Distance to sensitive environment receptors (Figure prepared by DWER Environmental Officer)

3.2 Risk ratings

Risk ratings have been assessed in accordance with the *Guideline: Risk Assessments* (DWER 2020) for each identified emission source and considers 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 works approval 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 4.

Works approval W6585/2021/1 that accompanies this decision report authorises construction, commissioning and time-limited operations. The conditions in the issued works approval, as outlined in Table 4 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 5 and 6 activities. A risk assessment for the operational phase has been included in this decision report, however licence conditions will not be finalised until the department assesses the licence application.

Table 4: Risk assessment of potential emissions and discharges from the premises during commissioning and operation

Risk events					Risk rating [1] C = consequence L = likelihood	Applicant controls sufficient?	Conditions [2] of works approval	Justification for additional regulatory controls
Sources / activities	**Potential emission**	**Potential pathways and impact**	**Receptors**	**Applicant controls**				
Construction								
Construction of: • gold processing plant and associated equipment • tailings storage facility • dewatering pipelines	Dust	Air/windborne pathway causing vegetation poor health/death for DBCA legislated "Majestic Timber Reserve" and adjacent native vegetation	"Majestic Timber Reserve" 400 m south of premises Adjacent native vegetation	Refer to Section 3.1	C = Moderate L = Unlikely **Medium Risk**	N	Conditions 1 and 2 – dust management	Applicant proposed controls for dust management will be placed on the works approval as regulatory controls. <u>DWER control</u> Additional regulatory control to prevent over-spraying of saline water during dust management have been placed on the works approval as regulatory control.
Commissioning								
Commissioning of the gold processing plant pipelines and dewatering pipeline, process water pond	Spills/leaks of process water contaminated with environmentally hazardous materials (metalloids, cyanide, processing plant reagents)	Direct discharge to land causing vegetation poor health/death for adjacent DBCA legislated "Majestic Timber Reserve, adjacent native vegetation and soil groundwater contamination. Potential contamination of ephemeral creek lines.	"Majestic Timber Reserve" 400m south of premises Underlying soils and groundwater (17 – 20 mbgl) Adjacent native vegetation Ephemeral creek lines	Refer to Section 3.1	C = Moderate L = Possible **Medium Risk**	N	Conditions 10 and 11 - testing of gold processing plant infrastructure during commissioning	Commissioning allowed for a short period of time only (not exceeding 5 calendar days in aggregate). The plant will have been constructed on a compacted pad and surface water management bunds installed. <u>DWER control</u> A requirement for bunds, sumps, process alarms, pipelines, flow metres and pressure metres to be tested during commissioning have been placed on the works approval as regulatory controls.

Risk events					Risk rating [1] C = consequence L = likelihood	Applicant controls sufficient?	Conditions [2] of works approval	Justification for additional regulatory controls
Sources / activities	**Potential emission**	**Potential pathways and impact**	**Receptors**	**Applicant controls**				
Operation (including time-limited-operations operations)								
Processing plant and process water pond								
Operation of the Processing Plant	Spills/leaks of process water contaminated with environmentally hazardous materials (metalloids, cyanide, processing plant reagents) Contaminated surface water run-off.	Direct discharge to land causing vegetation poor health/death for adjacent DBCA legislated "Majestic Timber Reserve, adjacent native vegetation and soil and groundwater contamination. Potential contamination of ephemeral creek lines.	"Majestic Timber Reserve" 400 m south of premises Underlying soils and groundwater (17 – 20 mbgl) Adjacent native vegetation Ephemeral creek lines	Refer to Section 3.1	C = Moderate L = Possible **Medium Risk**	Y	Condition 4 – processing plant construction requirements	Applicant proposed controls will be placed on the works approval as regulatory controls: in particular, proposed placement of the processing plant on compacted hardstand and installation of a surface water bund to divert stormwater away from operational areas.
	Dust	Air/windborne pathway causing vegetation poor health/death for DBCA legislated "Majestic Timber Reserve" and adjacent native vegetation	"Majestic Timber Reserve" 400 m south of premises Adjacent native vegetation	Refer to Section 3.1	C = Moderate L = Unlikely **Medium Risk**	Y	Condition 19 – infrastructure conditions during time limited operations	Applicant proposed controls for dust management will be placed on the works approval as regulatory controls.
Process water pond	Water contaminated with environmentally hazardous materials (metalloids, cyanide, processing plant reagents)	Seepage through base and embankments to soil and groundwater causing vegetation poor health/death for DBCA legislated "Majestic Timber Reserve" adjacent native vegetation and soil and groundwater contamination.	"Majestic Timber Reserve" 400 m south of premises Underlying soils and groundwater Adjacent native vegetation	Refer to Section 3.1	C = Moderate L = Possible **Medium Risk**	Y	Condition 4 – construction requirements to include HDPE liner Condition 19 – weekly inspection of liner integrity	Applicant proposed control, installing an HDPE liner, will be placed on the works approval as a regulatory control. Applicant proposed inspections of liner integrity will also be placed on the works approval as regulatory controls. Weekly, rather than proposed daily inspections have been placed within the condition

Risk events					Risk rating [1] C = consequence L = likelihood	Applicant controls sufficient?	Conditions [2] of works approval	Justification for additional regulatory controls
Sources / activities	**Potential emission**	**Potential pathways and impact**	**Receptors**	**Applicant controls**				
		Overtopping and direct discharge to land causing vegetation poor health/death for DBCA legislated "Majestic Timber Reserve" and adjacent native vegetation and soil and groundwater contamination Potential contamination of ephemeral creek lines.	"Majestic Timber Reserve" 400 m south of premises Underlying soils and groundwater Adjacent native vegetation Ephemeral creek lines	Refer to Section 3.1	C = Moderate L = Possible **Medium Risk**	Y	Condition 19 – freeboard requirement	Applicant proposed control for freeboard and inspections will be placed on the works approval as regulatory controls.
Stormwater pond	Contaminated stormwater run-off from processing plant	Seepage through base and embankments to soil and groundwater causing vegetation poor health/death for DBCA legislated "Majestic Timber Reserve" and adjacent native vegetation and soil and groundwater contamination	"Majestic Timber Reserve" 400 m south of premises Underlying soils and groundwater Adjacent native vegetation	Refer to Section 3.1	C = Minor L = Possible **Medium Risk**	Y	Condition 20 – discharge of clean stormwater only into the stormwater pond	Applicant proposed control for compacted clay base and receipt of clean stormwater water only will be placed on the works approval as a regulatory control.
		Overtopping and direct discharge to land causing vegetation poor health/death for DBCA legislated "Majestic Timber Reserve" and adjacent native vegetation and soil and groundwater contamination Potential contamination of ephemeral creek lines.	"Majestic Timber Reserve" 400 m south of premises Underlying soils and groundwater Adjacent native vegetation Ephemeral creek lines	Refer to Section 3.1	C = Minor L = Possible **Medium Risk**	Y	Condition 4 – construction requirements	Applicant proposed control for containing one in one hundred-year 72 hours rainfall event placed on the works approval as a regulatory control.

Risk events					Risk rating [1] C = consequence L = likelihood	Applicant controls sufficient?	Conditions [2] of works approval	Justification for additional regulatory controls
Sources / activities	**Potential emission**	**Potential pathways and impact**	**Receptors**	**Applicant controls**				
Tailings Storage Facility								
Discharge and storage of tailings in the TSF	Tailings and contaminated water (metalloids, cyanide)	Seepage through base and embankments to soil and groundwater causing vegetation poor health/death for DBCA legislated "Majestic Timber Reserve" and adjacent native vegetation and soil and groundwater contamination	"Majestic Timber Reserve" 400 m south of premises Underlying soils and groundwater Adjacent native vegetation	Refer to Section 3.1	C = Moderate L = Possible **Medium Risk**	Y	Condition 3 – construction requirements Condition 5 – groundwater monitoring bore installation Condition 18 – only tailings from Bulong (Myhree pit) and Imperial Majestic mine are permitted for deposition into the TSF Condition 19 – requirements during time limited operations Condition 20 – authorised discharge of tailings into TSF Condition 21 – tailings characterisation Condition 22 - 25 – groundwater monitoring and reporting Condition 26 – water balance monitoring	See Appendix 1.
		Overtopping of TSF and direct discharge to land causing vegetation poor health/death for DBCA legislated "Majestic Timber Reserve" and adjacent	"Majestic Timber Reserve" 400 m south of premises Underlying soils	Refer to Section 3.1	C = Moderate L = Possible **Medium Risk**	Y	Condition 3 – Constructed to provide minimum freeboard of 0.7 m and ability to store 1% annual exceedance	Applicant proposed controls (freeboard requirements) placed on the works approval as regulatory controls.

Risk events					Risk rating [1] C = consequence L = likelihood	Applicant controls sufficient?	Conditions [2] of works approval	Justification for additional regulatory controls
Sources / activities	**Potential emission**	**Potential pathways and impact**	**Receptors**	**Applicant controls**				
		native vegetation and soil and groundwater contamination	and groundwater Adjacent native vegetation				probability (AEP) 72-hour rain event Condition 19 – time limited operation freeboard requirements	
		Pipeline leak/rupture and direct discharge to land causing vegetation poor health/death for DBCA legislated "Majestic Timber Reserve" and adjacent native vegetation and soil contamination and groundwater contamination.	"Majestic Timber Reserve" 400 m south of premises Underlying soils and groundwater Adjacent native vegetation	Refer to Section 3.1	C = Moderate L = Possible **Medium Risk**	Y	Condition 3 – pipeline construction requirements Condition 19 – time limited operations pipeline inspections	Applicant proposed controls (bunds, telemetry etc) placed on the works approval as regulatory controls.
	Dust from tailings beaches	Air/windborne pathway causing vegetation poor health/death for DBCA legislated "Majestic Timber Reserve" and adjacent native vegetation.	"Majestic Timber Reserve" 400 m south of premises Adjacent native vegetation	Refer to Section 3.1	C = Slight L = Unlikely **Low Risk**	Y	N/A	Erosion of tailings beaches due to dust during short duration of time limited operations is unlikely to cause impact to sensitive receptors. No additional regulatory controls applied.
Dewatering								
Dewatering into Imperial Pit	Hypersaline mine dewater	Seepage through pit walls to groundwater causing vegetation poor health/death for DBCA legislated "Majestic Timber Reserve" and adjacent native vegetation and soil	"Majestic Timber Reserve" 400 m south of premises Underlying soils and groundwater Adjacent native	Refer to Section 3.1	C = Moderate L = Possible **Medium Risk**	N	Condition 5 – installation of a southern boundary monitoring well Condition 22 – groundwater	<u>DWER control</u> To monitor for potential migration of seepage to the nearby DBCA legislated reserve, a requirement has been placed to install a groundwater monitoring

Risk events					Risk rating [1] C = consequence L = likelihood	Applicant controls sufficient?	Conditions [2] of works approval	Justification for additional regulatory controls
Sources / activities	**Potential emission**	**Potential pathways and impact**	**Receptors**	**Applicant controls**				
		and groundwater contamination	vegetation Ephemeral salt lakes				monitoring Condition 27 – monitoring of water balance	bore and monitor water along the southern boundary of the premises.
		Overtopping of Imperial Pit and direct discharge to land causing vegetation poor health/death for DBCA legislated "Majestic Timber Reserve" and adjacent native vegetation and soil and groundwater contamination	"Majestic Timber Reserve" 400 m south of premises Underlying soils and groundwater Adjacent native vegetation	Refer to Section 3.1	C = Moderate L = Unlikely **Medium Risk**	Y	Condition 19 – 300mm freeboard Condition 20 – authorised discharge into Imperial Pit	Applicant proposed controls will be placed on the works approval as regulatory controls.
Transfer of hypersaline mine dewater via pipelines	Hypersaline mine dewater	Spills/leaks from pipeline failure leading to uncontrolled discharge to land and soil and groundwater contamination	"Majestic Timber Reserve" 400 m south of premises Underlying soils and groundwater Adjacent native vegetation	Refer to Section 3.1	C = Moderate L = Possible **Medium Risk**	N	Condition 3 – pipeline construction Condition 12 – pipeline commissioning	Applicant proposed controls (bunds, telemetry etc.) placed on the works approval as regulatory controls. <u>DWER control</u> Pipeline testing will be required as part of infrastructure commissioning.

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. **<u>Bold and underline text</u>** depicts additional regulatory controls imposed by department.

4. Consultation

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

Table 5: Consultation

Consultation method	Comments received	Department response
Application advertised on the department's website 3 September 2021	None received	N/A
Shire of Kalgoorlie-Boulder advised of proposal 3 September 2021	The City of Kalgoorlie-Boulder replied on 21/9/2021 indicating no objections to the application.	N/A
Department of Mines, Industry Regulation and Safety (DMIRS) advised of proposal 3 September 2021	DMIRS replied on 9 September 2021 that it has no objections to category 6 activities. They indicated that the Mining Proposal for construction of the TSF was withdrawn. DMIRS replied on 13 October 2021 indicating an updated Mining Proposal has been submitted to DMIRS for approval.	Before commencing works, the works approval holder is required to gain the relevant approvals under the Mining Act 1978.
Department of Biodiversity, Conservation and Attractions (DBCA) advised of proposal 3 September 2021	DBCA replied on 20 October 2021 that it has no comments on the application.	N/A
Applicant was provided with draft documents on 12 November 2021 and 6 December 2021.	Comments were received for the draft sent on 12 November 2021 and are summarised in Appendix 2. No comments were received for the second draft sent on 6 December 2021.	See Appendix 2.

5. Conclusion

Based on the assessment in this decision report, the delegated officer has determined that a works approval will be granted, subject to conditions commensurate with the determined controls and necessary for administration and reporting requirements. Note that the works approval holder is also required to gain the relevant approvals under the *Mining Act 1978*.

References

1. Campagna 2007, *Limnology and biota of Lake Yindarlgooda – an inland salt lake in Western Australia under stress*. Available from https://espace.curtin.edu.au/handle/20.500.11937/1883
2. CMW Geosciences 2021, *Tailings Storage Facility Hydrogeological Assessment, Bulong Gold Project Kalgoorlie,* DWER reference A2050908
3. Department of Environment Regulation (DER) 2015, *Guidance Statement: Setting Conditions*, Perth, Western Australia.
4. Department of Water and Environmental Regulation (DWER) 2020, *Guideline: Environmental Siting*, Perth, Western Australia.
5. DWER 2020, *Guideline: Risk Assessments*, Perth, Western Australia.
6. Graeme Campbell and Associates (GCA), 2021, *Myhree Deposit: Geochemical Characterisation of Tailings-Slurry Samples and Implications for Tailings Management*
7. Integra 2012, *Majestic Deposit Summary*
8. International Cyanide Management Institute, 2021. *Guidance for use of the mining operations verification protocol*. Available from https://cyanidecode.org/wp-content/uploads/2021/06/15-Mining-Guidance-JUNE-2021.pdf

Appendix 1. Tailings Storage Facility

The sections below describe the following aspects associated with the proposed tailings storage facility:

1. Tailings characterisation
2. Estimated seepage
3. Baseline groundwater characterisation
4. Baseline groundwater and hydrogeological conceptual site model
5. Construction and applicant proposed seepage management
6. Additional DWER regulatory controls

1. Tailings characterisation

Ore to be processed and deposited into the tailings storage facility for the first two years of operation will comprise 85% ore from the Bulong Myhree deposit (off-site) with the rest to be supplemented by the Majestic mine ore (on-site).

Bulong Myhree ore

Geochemical characterisation of two tailings-slurry samples considered representative of "oxide ores" and "primary ores" from the Myhree deposit was undertaken (Graeme Campbell and Associates [GCA], 2021). These are described below:

- Oxide-ore tailings – derived from a 50:50 blend of oxide ores and transition ores; and
- Primary-ore tailings – derived from a blend of fresh primary ores.

Both tailing sources were classified by GCA to be non-acid-forming (NAF), having <1% sulfides and the primary ore having an excess of carbonate alkalinity associated with calcareous dolomite within the ore.

Tailings slurry water samples were mildly alkaline (pH 8.7-9.1) and hypersaline. For both tailings-slurry water samples, copper (Cu) and nickel (Ni) were the chief cyanide-complexing metals in solution. Analysis for tailings slurry water samples are shown in Table 6 below. Concentrations of weak acid dissocial cyanide (WAD) ranged from 236-239 mg/L.

Table 6 Tailings slurry water analysis

ELEMENT/ PARAMETER	Oxide-Ore-Tailings (GCA11933)	Primary-Ore-Tailings (GCA11934)	ELEMENT/ PARAMETER	Oxide-Ore-Tailings (GCA11933)	Primary-Ore-Tailings (GCA11934)
Major-Parameters			*Minor-Ions (µg/L)*		
pH	8.7	9.1	As	20	10
pH (GCA)	8.8	9.1	Sb	3	5
EC (µS/cm)	124,300	124,200	Se	<50	<50
EC (GCA, µS/cm)	108,700	109,500	B	200	600
TDS-(grav.)	85,470	85,500	Mo	56	39
Major-Ions (mg/L)			Mn	200	500
			Al	2,100	1,000
Na	25,466	26,500	Cd	3	10
K	125	141	Pb	<50	<50
Mg	1,751.4	2,149.9	Cr	<100	<100
Ca	2,720.0	1,905.8	Bi	<1	<1
Cl	48,700	48,500	P	<1,000	<1,000
SO4	5,082	6,400	Ba	239	519
HCO3 (as CaCO3)	9	<2	Sr	20,268	13,346
CO3 (as CaCO3)	268	348	Tl	<1	<1
OH (as CaCO3)	<1	96	V	<100	<100
F	0.2	0.1	Sn	<10	<10
Si	2.8	1.3	U	<1	<1
			Th	<1	<1
Nitrogen-Forms (mg/L)			*Cyanide-Complexing Metals (mg/L)*		
NH3-N	65.000	2.400			
NO3-N	0.008	<0.005	Fe	0.1	0.8
			Cu	1.5	8.9
Cyanide Forms (mg/L)			Zn	0.7	0.9
			Ni	1.1	6.8
CNtot	277	243	Co	0.12	0.56
CNwad	239	236	Ag	0.03	0.13
CNfree	252	262	Hg	<0.01	0.04
SCN	5.69	26.39			

Notes:
EC = Electrical-Conductivity; TDS-(grav.) = Total-Dissolved-Solids-(gravimetric).
CNtot = Total-Cyanide; CNwad = Weak-Acid-Dissociable-Cyanide; CNfree = Free-Cyanide; SCN = thiocyanate.

Due to the elevated salinity, the detection-limits for numerous minor-elements were raised, and reflect dilution required to avoid matrix-interference effects in assaying.

Majestic mine ore

Limited data was provided regarding likely tailings composition from Majestic mine ore, and leach tests conducted by Integra Mining in 2012 were predominantly focused on gold extraction. Integra indicated that for the Majestic Ore "leach residue disposal to a standard tailings facility should not impose adverse acid mine drainage issues".

2. Estimated seepage

A water balance analysis for predicted future inflows and outflows for the proposed tailings storage facility estimated seepage to be approximately 20 m^3/day with several assumptions:

- use of only one tailings storage facility (one cell will be active whilst the other cell is inactive);
- tailings slurry density of 50%; and
- a decant pond area equal to approximately 5% of the tailings area.

The applicant has indicated that water recovery will also vary according to the management of the facility, with potential variability resulting from:

- Size of the decant pond;
- Variations in slurry density;
- Continuity of tailings discharge;
- Distance between the discharge point and decant pond; and
- Efficiency of the decant system during operation.

3. Baseline groundwater and hydrogeological conceptual site model

A hydrogeological study was undertaken by CMW Geosciences in March 2021 which included the advancement of seven boreholes within the vicinity of the proposed TSF, four of which were constructed as groundwater monitoring wells. Depth to groundwater ranged from 17.3 – 19.9 mbgl.

CMW (2021) states that the regional groundwater flow in the site vicinity is indicated to the north with recharge occurring in the higher terrain areas to the south of the site. The high salinities recorded (saline and hypersaline groundwater up to 84,000 mg/L TDS) indicate that in the project area, rates of groundwater recharge are very low. Recharge is inferred to be episodic rather than regular, and tied to significant rainfall events. This is consistent with climate conditions whereby the regional potential evapotranspiration (1,150 mm/year) far exceeds the low (257 mm/year) annual rainfall, with most light rainfall events lost returned to atmosphere through the high rate of evaporation

Groundwater flowing beneath the TSF site is inferred to ultimately discharge to Lake Yindarlgooda, (~7 km north of the TSF). An estimate of the seepage time from the TSF site to Lake Yindarlgooda was calculated by CMW (2021) using Darcy's Law of linear groundwater velocity. The groundwater linear velocity is estimated at 0.9 m/year, and the groundwater transport time from site to Lake Yindarlgooda is indicated to be approximately 7,000 years. Whilst there are closer ephemeral salt lakes (4.1km north-east of TSF), due to the distance of these salt lakes and Lake Yindarlgooda, these receptors are unlikely to be impacted by seepage from the TSF and have been discounted as receptors in the risk assessment.

Analytical results confirm groundwater salinity is high, ranging from 34,600 – 84,000 mg/L (hypersaline). Groundwater acidity was generally neutral to alkaline (pH 7.43 – 12.30), apart from one bore (BH02) with an acidic pH of 3.85. Groundwater results are given in Table 7 below.

Table 7 Groundwater monitoring CMW 2021

Analyte	Unit	BH01	BH02	BH03	BH04
pH	units	7.43	3.85	12.3	7.77
Total dissolved solids (TDS)	mg/L	75,400	64,700	34,600	84,000
Cyanide					
Total cyanide (TCN)	mg/L	<0.040	<0.040	<0.040	<0.040
Free cyanide (FCN)	mg/L	<0.040	<0.040	<0.040	<0.040
WAD cyanide	mg/L	<0.040	<0.040	<0.040	<0.040
Alkalinity					
Hydroxide alkalinity as $CaCO_3$	mg/L	<1	<1	1,460	<1
Carbonate alkalinity as $CaCO_3$	mg/L	<1	<1	509	<1
Bicarbonate alkalinity as $CaCO_3$	mg/L	237	<1	<1	110
Anions					
Total alkalinity ($CaCO_3$)	mg/L	237	<1	1,970	110
Chloride (Cl)	mg/L	32,800	27,900	19,300	36,000
Sulfate (SO_4)	mg/L	4,600	3,990	108	4,640
Cations					
Calcium (Ca)	mg/L	736	579	745	747
Magnesium (Mg)	mg/L	2,710	2,840	<1	3,110
Sodium (Na)	mg/L	22,600	16,600	13,200	23,700
Potassium (K)	mg/L	190	131	536	169

Analyte	Unit	BH01	BH02	BH03	BH04
Arsenic (As)	mg/L	<0.010	0.012	0.008	<0.010
Beryllium (Be)	mg/L	<0.010	0.020	<0.005	<0.010
Barium (Ba)	mg/L	0.115	0.123	6.69	0.083
Cadmium (Cd)	mg/L	<0.0010	0.0035	<0.0005	0.0020
Chromium (Cr)	mg/L	<0.010	0.015	0.082	<0.010
Cobalt (Co)	mg/L	<0.010	0.632	0.011	0.174
Copper (Cu)	mg/L	<0.010	0.090	0.058	0.056
Iron (Fe)	mg/L	<0.50	7.58	14.6	1.86
Lead (Pb)	mg/L	<0.010	0.017	0.012	<0.010
Manganese (Mn)	mg/L	1.61	13.5	0.548	12.0
Mercury (Hg)	mg/L	<0.0002	<0.0002	<0.0001	<0.0002
Nickel (Ni)	mg/L	<0.010	0.435	0.017	0.110
Selenium (Se)	mg/L	<0.10	<0.10	<0.05	<0.10
Vanadium (Va)	mg/L	<0.10	<0.10	0.06	<0.10
Zinc (Zn)	mg/L	<0.052	1.22	0.378	0.165
Boron (B)	mg/L	7.80	10.0	<0.25	9.02

It's noted that total recoverable hydrocarbons (TRH) were detected BH02 and BH03. Black Cat have indicated that, as part of on-going monitoring they will investigate the likely source and presence of TRH. At this stage the applicant infers that the most likely cause is a historic hydrocarbon spill on-site.

Boreholes advanced within the proposed TSF site indicate silty-gravelly clay from 2.5-6 mbgl followed by fractured/weathered granite. CMW (2021) indicates that the fractured granite is an unconfined aquifer overlying impermeable granitoid rock at depth. Figure 4 displays CMW's (2021) proposed hydrogeological conceptual site model.

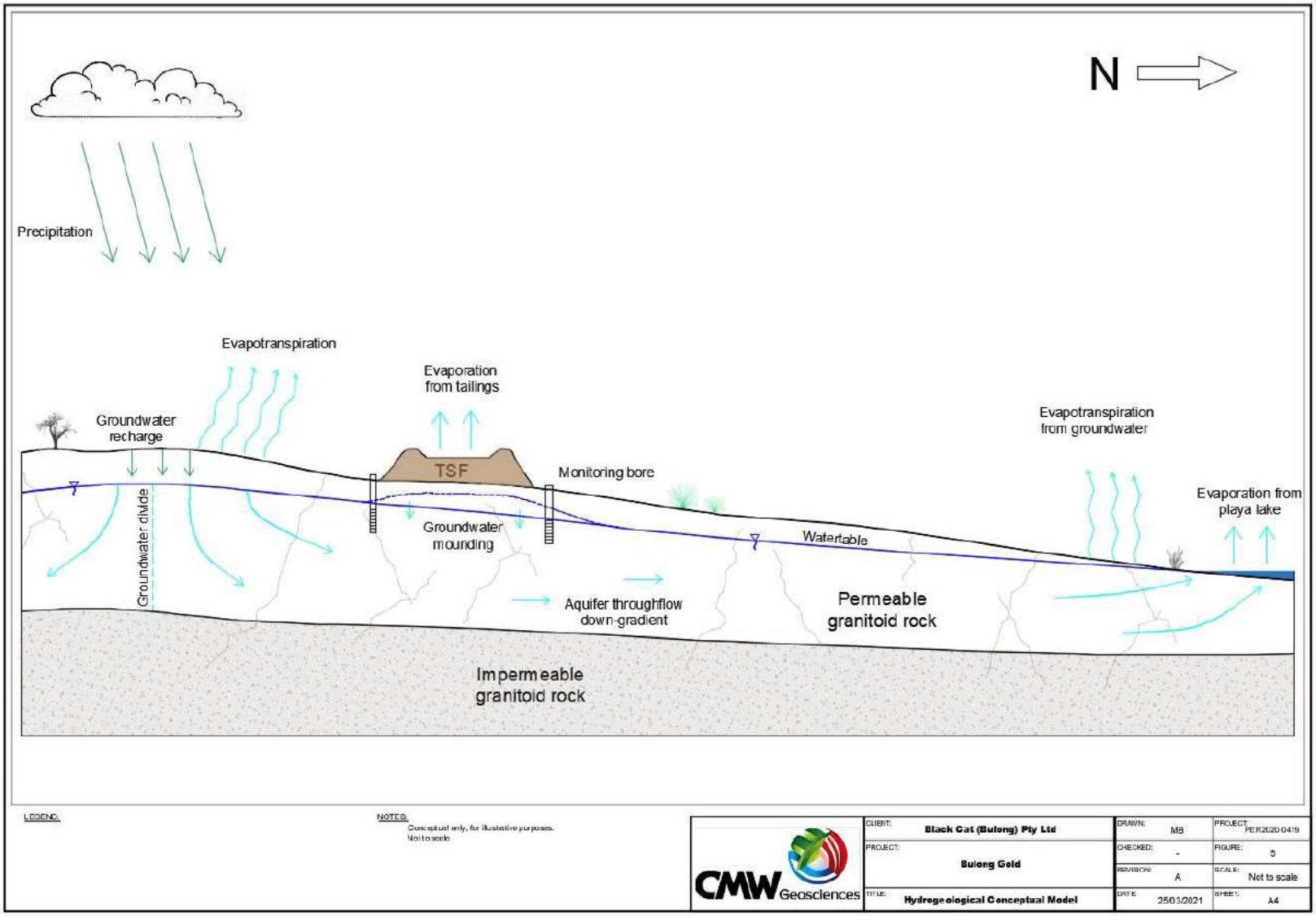

Figure 4: Hydrogeological conceptual site model

4. Construction and proposed seepage management

The TSF will be constructed with the following parameters relevant to part V approval:

- minimum embankment freeboard of 0.7 m;
- designed to contain a 1 in 100-year AEP, 72-hour duration storm rainfall event;
- tailings deposition will take place sub-aerially and cyclically into the facility from all sides of each TSF cell via spigots located along the perimeter of the TSF into the inner embankment;
- installation of pipelines, pipeline bunding, leak detection telemetry, pressure sensors system and automatic shut-off system and flow meters;
- parameters relevant to seepage management:
    - zoned embankments comprising an inner zone of low permeability compacted clay borrow materials and an outer zone of "traffic compacted" clayey gravel mine waste;
    - a cut-off trench, to nominally 1.0 m below ground level in the surficial clay layer has been included in the embankment design to reduce horizontal seepage losses;
    - water will be removed from each cell of the facility and pumped back to the process plant via a 'turret' pump decant system within a central "rock-ring" decant within each TSF cell;
    - return water will be recovered from the TSF decant using a Decant Return Pump to the runoff sump and will then be pumped to the plant for reuse. The water recovery system will have a capacity of ≥90 tph to recover water from storm events;
    - Development of a groundwater recovery plan if standing water levels (SWLs) reach 6 mbgl. Limit of 4 mbgl.
    - Weak acid dissociable cyanide target of 50 mg/L, not to exceed 100mg/L.
- Installation of monitoring instrumentation:
    - Three existing monitoring bores (MB1 – MB3) and additional three proposed monitoring bores (MB5 – 7 in Figure 2) (6 in total) are proposed for groundwater monitoring during TSF operation; and
    - A minimum of six vibrating wire piezometers (VWP) will be installed in the TSF foundations.

5. DWER regulatory controls

The assessed risk of seepage to nearby sensitive receptors (adjacent native vegetation and DBCA legislated reserve) is 'medium risk' with a consequence rating of 'moderate' and likelihood of 'possible'. To mitigate risk associated with seepage, the following DWER regulatory controls have been placed on the works approval (Table 8).

Table 8 DWER regulatory controls (seepage)

Condition/control	Justification
Tailings (Condition 18) (Condition 21)	Only tailings from the Bulong (Myhree pit) and Imperial Majestic mine are permitted to be deposited into the TSF. Tailings from other ore sources are not permitted (a works approval amendment will be required). Two tailings slurry samples were provided as representative samples for deposition into the Myhree TSF and limited data provided for the Majestic deposit. DWER does not consider this sample size sufficient and has placed a requirement for further tailings characterisation during time limited operations (10

Condition/control	Justification
	samples) on the works approval.
Water balance Condition 26	While an estimated water balance has been provided, the seepage (20 m^3/day) calculated is approximate only, and likely to vary according to facility management. A requirement for monitoring monthly water balance during time limited operations has been placed on the works approval.
Tailings storage facility construction requirements Condition 3	Applicant proposed construction specifications to prevent seepage have been placed on the works approval as regulatory controls. Any known drill holes previously advanced within the foundation of the TSF must also be filled and grouted to prevent formation of a preferential pathway for seepage to groundwater.
Infrastructure and equipment requirements during time limited operations Condition 19	Applicant proposed operational specifications to prevent seepage have been placed on the works approval as regulatory controls. Applicant proposed WAD target of 50mg/L on the decant has also been placed on the works approval as an upper limit. See further discussion in Appendix 2. Summary of applicant comments. As water balance modelling provided to DWER assumed that the decant pond would be 5% of the total tailings surface area and with only one cell operational at a time, these specifications have been placed as additional operational controls to minimise seepage and potential damage to adjacent vegetation health and the DBCA legislated reserve.
Groundwater monitoring Condition 3 – installation of vibrating wire piezometers Condition 5 – groundwater monitoring well construction Conditions 22 – 25 – groundwater monitoring, limits and reporting Condition 19 – vibrating wire piezometers (inspections during time limited operations)	The applicant has provided baseline groundwater monitoring results for four initial bores (one decommissioned) and proposes to install three additional bores for monitoring of the tailings storage facility. Results from initial groundwater bores indicate that groundwater flow direction is to the north towards ephemeral salt lake. The applicant has also proposed to install vibrating wire piezometers within the foundation of the TSF to monitor water levels. To monitor for potential groundwater mounding within the vicinity of the DBCA reserve, and to protect adjacent native vegetation, construction, monitoring and reporting requirements for groundwater monitoring wells and piezometers have been placed on the works approval as regulatory controls. Applicant proposed standing water level limit of 4 mbgl has been placed on the works approval as a regulatory control. Additionally, a trigger for management action at 6 mbgl has also been placed on the works approval as a regulatory control.

Appendix 2. Summary of applicant's comments on risk assessment and draft conditions

Condition	Summary of applicant's comment on DRAFT 1	Department's response on DRAFT 1
3	Black cat wishes to confirm that condition 3 refers to the TSF only. Can this be made clear in the condition statement?	Condition 3 refers to the tailings storage facility (critical containment infrastructure). The heading and operational requirements title have been altered to mention "tailings storage facility" for clarity.
18	Over the life of mine the Company has identified several other ore sources and will be seeking for a broader approval of a wider range of material sources. Black Cat notes the concerns of DWER in regards to characteristics of ore and tails and to ensure that problematic ore (for example ore with very high concentrations of contaminants of concern) is managed appropriately. To address this concern, we would like to propose that we identify acceptable characteristic ranges for the different ore types which can provide confidence to DWER that there are not problematic ores that have the potential to create unanticipated impacts. We accept that if a particular ore is "problematic" additional approvals may be required. Black Cat is reviewing existing metallurgical data to define characteristics across all ore types. Provided characteristics are deemed acceptable we will work with the DWER to achieve an operating licence that covers all the ore sources under consideration for the entire life of the project.	Black Cat Imperial have indicated that only tailings sourced from Bulong (Myhree pit) and the Imperial Majestic mine will be deposited into the TSF during the first phase of operations. For time limited operations associated with the works approval, only these ore sources may be permitted for deposition. However, DWER will explore the potential for a permissible ore characteristics range with Black Cat at the time of the licence application (a licence will be required for on-going operation of the site following completion of time limited operations as allowed by the works approval and it is recommended that details related to any additional ore sources are submitted as part of this application).
19	Please revise WAD CN to reflect Black Cat's proposed target of 50mg/L, not to exceed 100mg/L.	The International Cyanide Management Institute (2021) indicate "One of the few numerical guidelines included in the Code is a 50 mg/L WAD cyanide limit for exposure of birds, other wildlife and livestock. This recommended limit is based on evidence that solutions with up to 50 mg/l WAD cyanide are typically non-lethal to wildlife. Operations that restrict access by birds and other wildlife to open waters above this level are typically in full compliance with this Standard of Practice." It has therefore been conditioned that the applicant either nets and fences the tailings storage facility to restrict access to

Condition	Summary of applicant's comment on DRAFT 1	Department's response on DRAFT 1
		birds and other wildlife OR adhere to an upper limit of 50mg/L WAD in the decant pond.
4 & 19	Information provided in the response to the RFI was in error and the company does not intend to line the stormwater pond. The stormwater pond will not be lined for the following reasons: • The stormwater pond is not designed as a permanent water storage asset; • The stormwater pond's main design intent is to contain surface run off from storm events and to reduce site generated sedimentation emissions off sit into the broader environment. • All chemical storage areas in the process plant will be bunded with secondary containment in accordance with AS1940 and AS1692 and maintained in a clean and chemical free state; • In the unlikely event of a catastrophic vessel failure and a major storm event that releases outside secondary containment, the stormwater pond provides a third level of containment to minimise loss of pollutants off-site. The compacted clay base is required for structure integrity as opposed to any permeability requirement, noting that the pond is **intended to receive clean surface water run off only**. It should be noted that the capacity of the stormwater pond will be maintained with periodic excavation as required.	DWER has revised the condition to remove the requirement for HDPE lining of the stormwater pond and included in conditions 19 and 20 that the stormwater pond is to receive clean stormwater only. Applicant proposed periodic excavation to maintain capacity has also been placed in the operational requirements of condition 19.

Appendix 3. Application validation summary

SECTION 1: APPLICATION SUMMARY (as updated from validation checklist)		
Application type		
Works approval	☒	
Date application received		3 August 2021
Applicant and premises details		
Applicant name/s (full legal name/s)		Black Cat (Bulong) Pty Ltd
Premises name		Imperial Majestic Mine
Premises location		M25/350
Local Government Authority		City of Kalgoorlie-Boulder
Application documents		
HPCM file reference number:		DER2021/000439
Key application documents (additional to application form):		Part V Works Approval Supporting Document
Scope of application/assessment		
Summary of proposed activities or changes to existing operations.		Proposed construction of a gold processing plant, TSF and dewatering pipeline. Mining will be undertaken at two new developments for underground deposits at the existing Imperial and Majestic Pits at the site. To allow for the mining of ore at the Majestic Pit, the applicant proposes to discharge mine dewater currently stored in the Majestic Pit to the adjacent Imperial Pit, from where it will be used as process water. Once dewater is depleted, mining will commence at the Imperial Pit.

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

Table 1: Prescribed premises categories

Prescribed premises category and description	Proposed production or design capacity	Proposed changes to the production or design capacity (amendments only)
Category 5: Processing or beneficiation of metallic ore	800,000 tonnes per annual period	
Category 6: Mine dewatering	1,000,000 tonnes per annum	

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 ☐ No ☒	Referral decision No: Managed under Part V ☐ Assessed under Part IV ☐

SECTION 1: APPLICATION SUMMARY (as updated from validation checklist)		
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)?	Yes ☒ No ☐	Certificate of title ☐ General lease ☐ Expiry: Mining lease / tenement ☐ Expiry: 2033 Other evidence ☐ Expiry:
Has the applicant obtained all relevant planning approvals?	Yes ☐ No ☐ N/A ☒	Approval: Expiry date: Not required with mining tenement
Has the applicant applied for, or have an existing EP Act clearing permit in relation to this proposal?	Yes ☒ No ☐	CPS No: CPS 9418/2
Has the applicant applied for, or have an existing CAWS Act clearing licence in relation to this proposal?	Yes ☐ No ☒	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 ☒ No ☐	Licence/permit No: GWL 181140(4) and 176418(4)
Does the proposal involve a discharge of waste into a designated area (as defined in section 57 of the EP Act)?	Yes ☐ No ☐	Name: Goldfields Groundwater Area Type: Proclaimed Groundwater Area Has Regulatory Services (Water) been consulted? Yes ☐ No ☐ N/A ☒ Regional office: Goldfields
Is the Premises situated in a Public Drinking Water Source Area (PDWSA)?	Yes ☐ No ☒	Name: N/A Priority: N/A Are the proposed activities/ landuse compatible with the PDWSA (refer to WQPN 25)? Yes ☐ No ☐ N/A ☒

SECTION 1: APPLICATION SUMMARY (as updated from validation checklist)		
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*
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 *Contaminated Sites Act 2003*?	Yes ☒ No ☐	Classification: N/A Date of classification: N/A