



Application for Works Approval

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

Works Approval Number W6967/2024/1

Applicant Focus Operations Pty Ltd

ACN 115 821 255

Application Number APP-0026159

Premises

Three Mile Hill Gold Project
COOLGARDIE WA 6429

Legal description - Mining Tenements M15/1114, M15/154, M15/645, M15/646, M15/660, M15/958, M15/1294, M15/1432, M15/1788 and L15/161

As defined by the premises map depicted in Schedule 1 of the Works Approval

Date of report 28 February 2025

Decision Works approval granted

MANAGER, RESOURCE INDUSTRIES
INDUSTRY REGULATION (STATEWIDE DELIVERY)

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 W6967/2024/1 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

On 2 September 2024, Focus Operations Pty Ltd (the applicant) submitted an application for a works approval to the department under section 54 of the *Environmental Protection Act 1986* (EP Act).

The application is to undertake construction works relating to dewatering activities at Three Mile Hill Gold Project (the premises), approximately 2.5 km south of Coolgardie. The proposed activities are limited only within the mining tenements M15/646, M15/660, M15/958 and M15/1114. The proposal includes:

- Construction of mine dewatering pipeline from the Dreadnought and Alicia pits to two Mine Water Ponds (MWPs), and from there into the Brilliant pit
- Construction of two HDPE lined surface Mine water ponds (MWPs)
- Installation of a mobile crushing and screening plant either within Dreadnought or Big Blow Waste Rock Landform (WRL) footprints
- Time limited operation of the dewatering infrastructure and mobile crushing and screening infrastructure for 180 calendar days.

The premises relates to the categories and assessed production capacity under Schedule 1 of the *Environmental Protection Regulations 1987* (EP Regulations) which are defined in works approval W6967/2024/1. 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 W6967/2024/1.

2.3 Proposed activities

The Applicant is seeking approval related to Category 6 and 12 activities under this Works Approval (W6967/2024/1). The applicant is also authorised to undertake activities relating to Category 5, 6, and 89 at the Three Mile Hill Gold Project, under licence L8249/2008/3.

Mine dewatering activities

The applicant anticipates extending their mining activities at the Three Mile Hill Gold Project into Alicia and Dreadnought pits located in the southern part of the premises. Alicia pit is a previously unmined pit and identified as a near surface deposit, whereas Dreadnought pit last mined in mid-2013 and has completed a 65 metres deep pit. To facilitate the mining activities at those pits, the applicant proposes to dewater the current pit lakes in the two pits for a period of 5.5 years. Groundwater level at Alicia pit lies about 57 meters below ground level (mbgl). Therefore, dewatering of the pit lake will not be required until approximately 150 days from commencement of the mining activities. However, the Dreadnought pit lake is located below groundwater level

and will require dewatering to commence mining activities.

It is proposed that the mine dewater will be first pump into two new MWP's adjacent to Alicia pit. These MWP's are to be constructed with raised embankments and will consist of a settling pond, which will then overflow to a holding pond. A portion of the mine dewater will be used for dust suppression activities. The remaining mine dewater is proposed to be discharged into Brilliant pit, which is an inactive mine pit. Historically, Brilliant pit has received mine dewater from the Tindal underground mine. However, dewatering discharge into Brilliant has ceased in early 2013.

Alicia and Dreadnought Pits will be mined in sequence and it is therefore not expected for the two pits to be dewatered simultaneously. Based on modelling, the maximum dewatering rate at the Dreadnought pit is expected to be 11.5 L/s which is estimated to be reached towards the end of the project (in the 5 year). Given the smaller size of the Alicia pit, dewatering rate at Alicia pit predicted to be 5.72 L/s. Allowing for a 35% contingency, the applicant is seeking approval to discharge 468,000 kiloliters (kL) of mine dewater per annual period.

Groundwater quality

Groundwater in the local aquifers in Coolgardie area contain saline to hypersaline groundwater. Storage of groundwater within these aquifers are limited to secondary porosity and available in discrete, local scale fractures. Six monitoring bores have been installed across the premises and groundwater levels within the premises vary between 45 to 155 meters below ground level (mbgl). The deepest level of groundwater was detected near Brilliant pit, which was 155.6 mbgl (Table 1). The groundwater levels near Alicia and Dreadnought pits are 44 and 57 mbgl respectively.

Based on the limited data provided, it can be seen that the pH is neutral at all bores, with an average around 7.8. Electric conductivity (EC) and Total Dissolved Solids (TDS) values show that the water is saline at all locations as expected, in line with the regional hydrology. Groundwater quality data from within the premises is shown in the Table 1 below.

Table 1: Groundwater quality at Alicia, Dreadnought and Brilliant pits

Analyte	Bore			
	Alicia	Dreadnought	Brilliant 1	Brilliant 2
SWL (January 2024)	58.9	45.7	155.6	75.4
pH	7.8	7.9	-	7.7
Electric Conductivity (µs/cm)	33,250	23,000	-	36,000
TDS (mg/L)	10,675	6,450	-	24,000

Crushing and screening activities

The applicant anticipates installing a mobile crushing and screening plant within either the Dreadnought or Big Blow WRL footprints. Crushing and screening activities are proposed to generate road base and hardstand material to utilise during the development of this project. All crushed / screened material is to be used within the prescribed premises.

Inert waste rocks material will be fed into the hopper and then the material will be crushed using a jaw crusher. Stockpiles will be wetted down before crushing and screening activities to minimise any dust impacts. Crushed material will be then transferred to the adjacent screening unit using a conveyor and will go through a secondary crushing and screening process where material will be sorted into several sizes from approximately 5mm to 300mm. A service truck

will be used to feed the diesel engine of the plant, and no hydrocarbons will be stored within the premises. It is stated that the actual crushing and screening throughput will vary according to the requirements of the project, however the applicant is seeking approval to process 100,000 tonnes per annual period.

2.4 Part IV of the EP Act

On 25 May 2024, Focus Operations Pty Ltd referred the proposal to the Environmental Protection Authority (EPA) to be assessed under Part IV of the EP Act due to potential impacts on flora and vegetation from the clearing of 165 hectares of vegetation, inland water from mine dewatering and social impacts in the heritage value area.

The EPA decided on 27 September 2024, to not to assess the proposal under Part IV of the EP Act. Any potential impacts associated with clearing of native vegetation including impacts for habitats of threatened fauna species is to be managed by Part V Division 2 of the EP Act. There are no permanent water features, and no groundwater dependent ecosystems present in the proposed project area. Thus, no significant residual impacts are predicted for inland waters. EPA therefore determined that any potential impacts from the mine dewatering activities is to be managed by Part V Division 3 of the EP Act. The applicant is continuously engaging with the Traditional Owner groups and has also conducted an Aboriginal heritage survey on behalf of the Traditional Owners. The EPA therefore determined that no direct residual impacts to Aboriginal heritage sites or values are expected as a result of the proposed project.

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.

Table 2: Proposed applicant controls

Emission	Sources	Potential pathways	Proposed controls
Construction			
Dust	Construction of dewatering pipelines and related infrastructure, Installation of crushing and screening and related ancillary infrastructure	Air / windborne pathway	• Water carts to be used at the premises for dust suppression • Visual dust monitoring • Monitoring of weather conditions • Mobile machinery to remain on established tracks

			Activities to cease if controls implemented are not deemed effective
Noise			the applicant is required to comply with the Environmental Protection (Noise Regulations) 1997 at all times.
Operation			
Hypersaline mine dewater	Storage of mine dewater in MWP	Seepage	Lined with HDPE to prevent seepage
		Overtopping and loss of containments	- Embankments to be constructed with 2:1 batter - operational freeboard of 300 mm will be maintained in MWPs at all times - constructed to allow for 1:100 AEP rainfall events
	Operation of mine dewatering pipelines	Pipeline leaks and rupture	- HDPE pipelines installed in accordance with AS2033:2024 and with an appropriate pressure rating - Dewatering pipelines to be contained within a nominal 500 mm deep v-drain and will have the capacity to contain spillage up 12 hours - Scour pits to be placed at low points over the pipeline route where required and sized sufficiently to contain the volume of the pipeline for approximately 6 hours - Daily pipeline inspections to be carried out to ensure breather valves are not leaking and to ensure pipeline integrity - Daily inspection of scour pits to be carried out to ensure they are not at risk of overflowing
	Deposition of mine dewater at Brilliant pit	Overtopping of Brilliant pit	- a freeboard of 4 meters below pit crest to be maintained - Brilliant pit is currently dry and therefore a significant volume for storage is available
		Seepage	- Monitoring of standing water level and volume of dewatering water to be carried out quarterly in according with operating licence - Discharge water quality to be monitored in the Brilliant pit as per the current operating licence
Dust	Crushing and screening of material	Air / windborne	Stockpiles to be watered before crushing/ screening activities as

		pathway	required - Visual dust monitoring and operations to be ceased during periods of high wind conditions - Water cart will be at all the times
Noise	Crushing and screening of material Vehicle movement during construction activities	Air / windborne pathway	Will operate to comply with <i>Environmental Protection (Noise) Regulations 1997</i>
Contaminated (sediments) stormwater	Excess water used for dust control during all onsite activity including stockpile dust management and heavy rainfalls resulting in stormwater	Excess water overland runoff	Surface water diversion channels or drains to be constructed
Hydrocarbon spills and leaks	Mobile crushing and screening plant	Direct discharge	- Spill kits to be available on site and spill management to be carried out as per Environmental Management System - Hydrocarbons to be stored in bunded areas with a holding capacity of 110% - Equipment pre-started and used in line with manufacturer's specifications

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 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 3: Sensitive human and environmental receptors and distance from prescribed activity

Human receptors	Distance from prescribed activity
Coolgardie townsite / Great Eastern Highway	Approximately 2 km away from the Big Blow WRL where crushing and screening plant will be located (closest of the two WRLs)
Residential receptor	Approximately 800 m to the North-west from the Big Blow WRL where crushing and screening plant may be located.
Environmental receptors	Distance from prescribed activity
Native vegetation	The project area is comprised primarily of Eucalypt woodlands and an understorey of bluebush and salt bush. The vegetation condition in the area varies from excellent to

	completely degraded with degraded areas including mine workings, grazing, vehicle tracks, weeds and rubbish.
Fauna	All fauna species recorded are considered relatively common and widespread. Although, the habitat considered as suitable for significant fauna, due to the mining operations, occurrence of these fauna species in the project area are expected to be minimal.
Underlying groundwater (non-potable purposes)	The Project area is located within the Goldfields declared groundwater area. Local aquifers are generally containing saline to hypersaline groundwater. Average total dissolved solids (TDS) in the Alicia pit is 10,675 mg/L and in Dreadnought pit is 6,450 mg/L. Based on the bore monitoring data, depth to the groundwater around the Brilliant pit ranges from 75 – 155 mbgl.
Surface water drainage line	Adjacent to the Brilliant pit and immediately south of the Big Blow WRL
Cultural receptors	Distance from prescribed activity
Aboriginal heritage site	There are several Aboriginal heritage sites, of which the buffer area (2 kmx2 km) is intersecting the Brilliant pit and the Big Blow and Dreadnought WRLs (Figure 1 below). However, the actual heritage site locations are more than 500m away from the Brilliant pit and the crushing and screening locations (WRLs). These sites have been screened out as a receptor due to lack of pathway.

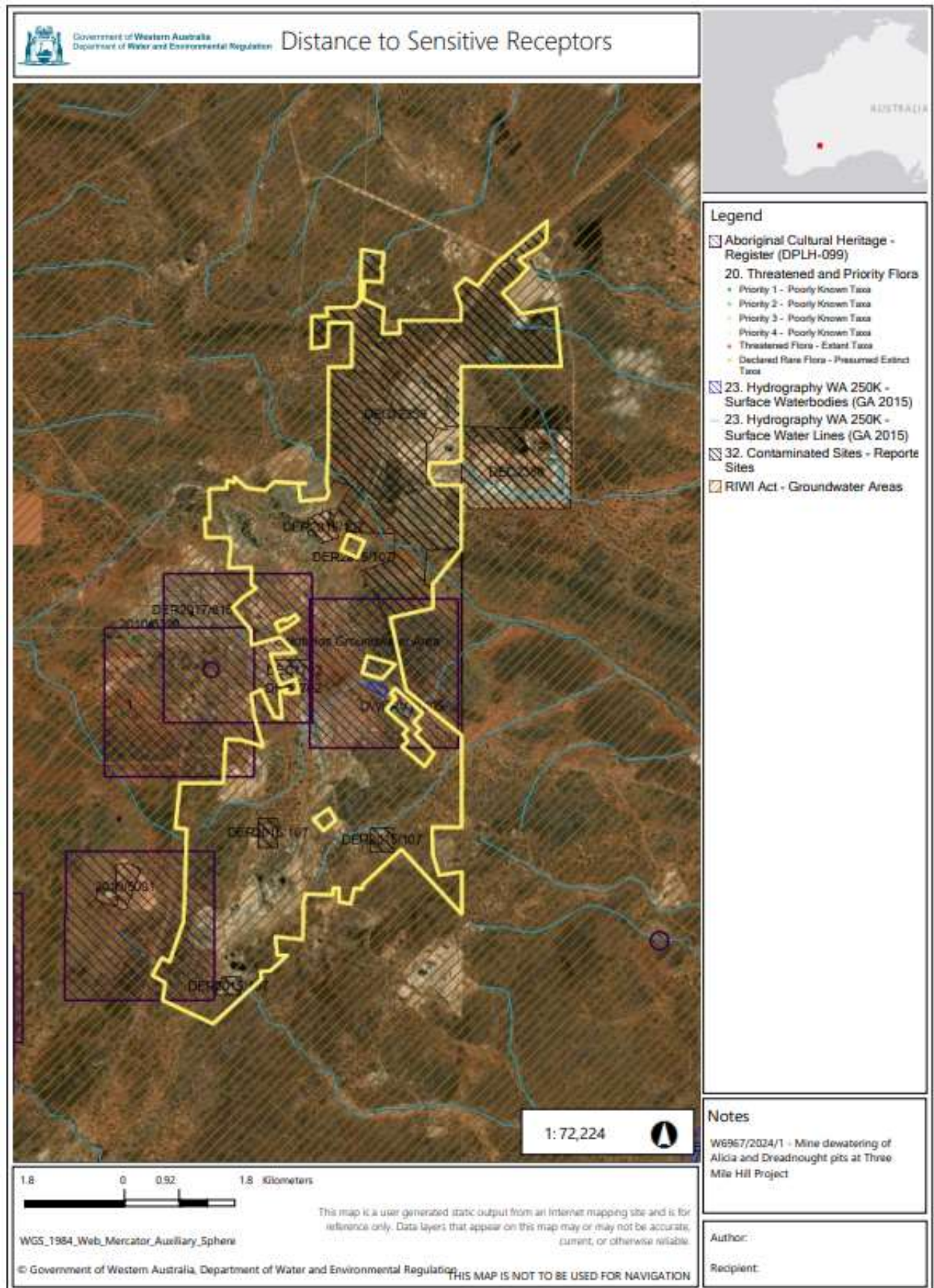


Figure 1: Distance to sensitive receptors

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 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 W6967/2024/1 that accompanies this decision report authorises construction 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 amendment 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. dewatering and crushing and screening 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 construction 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 dewatering pipelines and water storage dams and placement if crushing and screening plants	Dust	Pathway: Air / windborne pathway Impact: health and amenity	Residential receptor located appx. 800m from the Big Blow WRL Native Vegetation	Refer to Section 3.1.1	C = Slight L = Unlikely Low Risk	Y	Condition 1 – Design and construction requirements	Additional regulatory controls are not required to control any potential impacts from dust, during construction activities. Applicant proposed controls have been conditioned in the Works Approval.
Installation of mobile crushing and screening plant	Noise		Residential receptor located appx. 800m from the Big Blow WRL	Refer to Section 3.1.1	C = Slight L = Unlikely Low Risk	Y	N/A	N/A
Operation (including time-limited-operations operations)								
Transportation (via pipelines) and storage (in MWPs) of mine dewater	Saline mine dewater	Pathway: Pipeline leaks or rupture Impact: Direct discharge to land, resulting in impacts to ecological health	Native vegetation	Refer to Section 3.1.1	C = Minor L = Unlikely Medium Risk	Y	Condition 1 – dewatering pipeline construction requirements Condition 6 – dewatering pipeline operational requirements	Applicant’s proposed controls are adequate to manage this risk event. Applicant’s controls conditioned within the works approval.
		Pathway: Overtopping of MWPs Impact: direct discharge of saline mine dewater to land impacting ecosystem health		Refer to Section 3.1.1	C = Minor L = Unlikely Medium Risk	Y	Condition 1 – Mine water pond construction requirements Condition 6 – Mine water pond operational freeboard requirements	An operational freeboard of minimum 300 m has been proposed by the applicant as a control to manage potential risk of overtopping of the mine water ponds. This control has been conditioned as an operational requirement under the Works Approval. No additional regulatory controls are required.

		Pathway: Seepage from MWP Impact: Impacts to quality groundwater levels	Native vegetation Groundwater	Refer to Section 3.1.1	C = Slight L = Unlikely Low Risk	Y	Condition 1 – Mine water pond construction requirements Condition 6 – Mine water pond operational requirements	Mine water ponds are HDPE lined containment infrastructure and therefore risk of seepage from the ponds is unlikely. The Applicant's control has been conditioned within the works approval as a construction requirement.
Deposition of mine dewater into Brilliant pit	Mine dewater from Alicia and Dreadnought pits	Pathway: Overtopping of Brilliant pit Impact: Overland runoff of mine dewater, resulting in impacts to ecological health.	Native vegetation Surface water drainage lines	Refer to Section 3.1.1	C = Moderate L = Unlikely Medium Risk	Y	Condition 6 – operational freeboard requirements at Brilliant pit	Brilliant pit is already an authorised discharge point for mine dewater approved on the licence. It is currently approved to accept water from dewatering of Tindal's underground mine; however, discharge hasn't occurred since 2013. The application supporting documents states that Brilliant pit is currently "dry" and has significant available capacity. The Applicant has proposed to maintain a freeboard of 4 meters below crest level within Brilliant pit, this requirement is already conditioned on the licence and will be repeated in the works approval. No additional regulatory controls are required to manage this risk event.
		Pathway: Vertical infiltration and lateral migration of pit water Impact: Impacts to quality of groundwater resources	Native vegetation Groundwater	Refer to Section 3.1.1	C = Minor L = Possible Medium Risk	Y	Condition 10 – Monitoring of discharges during time limited operation	Groundwater surrounding the source and discharge pits appear to have similar water quality, however minimal data has been provided for the source pits. The Delegated Officer considers additional monitoring requirements to be necessary to monitor this risk event. Condition 10 has been added to the works approval to require monthly and quarterly discharge quality monitoring of an expanded monitoring suite during time limited operations. The monitoring data collected during time limited operation would better inform the risk assessment for the operation of this prescribed activity for the future licence amendment.
		Pathway: Vertical infiltration and lateral migration of pit water Impact: potentially resulting in groundwater mounding and/or surface expression of groundwater	Native vegetation	Refer to Section 3.1.1	C = Minor L = Rare Low Risk	Y		The depth to groundwater surrounding Brilliant pit is approximately 75 - 155 meters below ground level. This significantly reduces the risk for groundwater mounding to occur. The applicant's proposed freeboard of 4 mbgl will also prevent any mounding from reaching the surface where it could potentially impact vegetation due to waterlogging etc. The applicant's proposed controls will be conditioned within the works approval.
Operation of the mobile crushing and screening plant Vehicle movements on unsealed roads	Dust	Pathway: Air / windborne Pathway Impact: Impacts ecosystem Health (smothering of vegetation)	Residential receptor located appx. 800m from the Big Blow WRL Native vegetation	Refer to Section 3.1.1	C = Minor L = Unlikely Medium Risk	Y	Condition 1 – Crushing and screening plant construction requirements Condition 6 – Crushing and screening plant operational requirements	Applicant's proposed controls have been conditioned in the works approval (manage dust with water cart) as they have been determined to be adequate to manage this risk event.
	Noise	Pathway: Air / windborne pathway Impact: Impacts to health	Residential receptor located appx. 800m from	Refer to Section 3.1.1	C = Minor L = Unlikely	Y	N/A	Residential receptors are located more than 800m from the Big Blow WRL where the crushing and screening plant will be located. The plant will be within the WRL on an active mine site and will be operated for short periods of

		and amenity	the Big Blow WRL		Medium Risk			time on a campaign basis. The EPAs Guidance for the Assessment of Environmental Factors: Separation Distances between Industrial and Sensitive Land Uses 2005 indicates that a separation distance of 500-1000m is recommended for crushing and screening activities and residential receptors. Considering that the plant will be located more than 800m away and operated for short periods at a time it is unlikely that significant impacts from noise will occur at the nearest residential receptor. The applicant will be required to comply with the <i>Environmental Protection (Noise) Regulations 1997</i> at all times.
	Contaminated (sediments) stormwater	Pathway: Overland run off Impact: contamination of soils and impacts to ecosystem health	Native vegetation Surface water drainage lines	Refer to Section 3.1.1	C = Minor L = Unlikely Medium Risk	Y	Condition 1 – Crushing and screening plant construction requirements Condition 6 – Crushing and screening plant operational requirements	Applicant' proposed controls have been conditioned in the works approval as they have been determined to be adequate to manage this risk event.
	Hydrocarbon spills and leaks	Pathway: Direct discharge to land Impact: contamination of soils	Native vegetation Soil	Refer to Section 3.1.1	C = Slight L = Unlikely Low Risk	Y	N/A	Crushing and screening operations are to be carried out only with the WRL areas and therefore any spill will be contained within the WRL footprint. The <i>Environmental Protection (Unauthorised discharge) Regulations 2004</i> apply. Additional regulatory controls are not required.

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. **Bold and underline text** 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 on 20 October 2024	None received.	N/A.
Local Government Authority advised of proposal on 21 October 2024 Shire of Coolgardie	None received.	N/A.
Other Stakeholders: Marlinyu Ghoorlie Aboriginal Corporation advised of proposal on 21 October 2024	None received.	N/A.
Applicant was provided with draft documents on 24 February 2025	Applicant responded on 25 February 2025 to waive the consultation period with no comments made.	Noted.

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.

References

1. Email titled "Focus Minerals Ltd - Alicia - Dreadnought Open Pts Project - Works Approval Application" and supporting documents attached within the OneDrive shared link dated 02/0/2024 authored by Gemma Blick, available at DWER records (DWERDT999979)
2. Department of Environment Regulation (DER) 2015, *Guidance Statement: Setting Conditions*, Perth, Western Australia.
3. Department of Water and Environmental Regulation (DWER) 2020, *Guideline: Environmental Siting*, Perth, Western Australia.
4. DWER 2020, *Guideline: Risk Assessments*, Perth, Western Australia.