Amendment Report

Application for Licence Amendment

Part V Division 3 of the Environmental Protection Act 1986

Licence Number L8249/2008/3

Licence Holder Focus Operations Pty Ltd

ACN 115 821 255

File Number 2011/005901-2

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 maps attached to the revised

licence

Date of Report 12 September 2022

Decision Revised licence granted

A/MANAGER, RESOURCE INDUSTRIES REGULATORY SERVICES

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

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1. Decision summary

This 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, revised licence L8249/2008/2 has been granted.

The revised licence issued as a result of this amendment supersedes the existing licence previously granted in relation to the premises.

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 and overview of premises

Focus Operations Pty Ltd (licence holder) currently holds licence L8249/2008/2 for categories 5, 6 and 89 under Part V of the *Environmental Protection Act 1986* (EP Act) for the operation of the Three Mile Hill Gold Project (the premises). The prescribed premises boundary is located approximately 1 km east of the town of Coolgardie.

On 4 May 2022, the licence holder submitted an application to the department to renew and amend licence L8249/2008/2 under section 59 and 59B of the EP Act.

This amendment is limited to the following:

- extend licence for a period of 20 years (new expiry date of 2042 in accordance with *Guidance Statement: Licence Duration (2016))*. This amendment is administrative in nature and a reassessment of the risk profile of the Premises has not occurred (other than for the proposed new amendments below);
- update the prescribed premises boundary to include mining tenements M15/1788 and L15/161;
- install and operate new category 6: mine dewatering infrastructure and include new mine dewatering discharge points; and
- relocate the Greenfields Landfill to a new location approximately 50m south from the
 original location (approved within the existing licence L8249/2008/2) to align the landfill
 with the current mine site design. The Delegated Officer has determined that the
 relocation does not change the risk profile for this activity and therefore the relocation of
 the landfill is deemed acceptable. The construction and operation of the landfill has
 already been assessed and authorised under the current licence, and therefore will not
 be considered further in this decision report.

Table 1 provides further detail on the proposed changes to the activities being undertaken at the premises.

No changes to the requirements of the existing licence relating to category 5 (Processing or beneficiation of metallic or non-metallic ore) activities have been requested by the licence holder.

The CEO has also determined to include minor administrative changes as part of the licence amendment, these are limited only to:

Licence: L8249/2008/3

- updating the format and appearance of the licence;
- updating outdated figures; and
- correcting clerical mistakes and unintentional errors.

Table 1: Proposed changes

Prescribed premises category and description Category 5: Processing or beneficiation of metallic or non-metallic	Current assessed production or design capacity 1.5 million tonnes per annual period	Proposed changes to the production or design capacity No proposed changes.	Description of proposed amendment No proposed changes.
category 6: Mine dewatering	475,000 kL per annual period	No proposed changes	Construction 1. Construction of new dewatering infrastructure: a. Dewatering pipeline from Greenfields Pit to the Gravity Dam to the Process Pond; and b. Dewatering pipeline from Greenfields Pit to CNX Pit. Updates to existing operations New dewatering points proposed: 2. Greenfields Pit: Dewater approximately 400,000 kL of mine dewater from the Greenfields Pit over a 15-month period prior to commencement of mining: a. Greenfields Pit into the Gravity Dam and then to the Process Dam; and b. Greenfields Pit to CNX Pit. For noting: o The applicant's preferred option is to dewater into the Gravity Dam and then into the Process Pond for direct use in the mill, with excess mine water discharged into the CNX pit. The existing licence L8294/2008/2 demonstrates that the Gravity Dam and Process water pond are lined with HDPE liner to achieve a permeability of 10-9 m/s.

Prescribed premises category and description	Current assessed production or design capacity	Proposed changes to the production or design capacity	De	escription of proposed amendment
			3.	Dreadnought Pit:
				Dewater approximately 50,000 kL of mine dewater from the Dreadnought Pit over a 6-month period:
				 Mine dewater within Dreadnought Pit pumped via a submersible pump to a standpipe located within the pit bund; and
				 Water trucks will then fill up from the standpipe as required and mine dewater used in dust suppression activities within the prescribed premises boundary.
				For noting:
				 The applicant has advised that:
				 approximately 141,000 kL of mine water is currently stored within the Dreadnought Pit; and
				 dewatering volumes will remain within the licence L8249/2008/2 limits and that a licence amendment will be sought if additional dewatering volumes are required.
			4.	Big Blow Pit:
				Dewater approximately 2,800 kL of mine dewater from the Big Blow Pit over a three-month period:
				 Mine dewater within Big Blow Pit pumped via a submersible pump to a standpipe located within the pit bund; and
				 Water trucks will then fill up from the standpipe as required and mine dewater used in dust suppression activities within the prescribed premises boundary.
				For noting:
				 The applicant has advised that dewatering volumes will remain within the licence L8249/2008/2 limits and that a licence amendment will be sought if additional dewatering volumes

Prescribed premises category and description	Current assessed production or design capacity	Proposed changes to the production or design capacity	Description of proposed amendment
			are required.
Category 89: Putrescible landfill site	2,500 tonnes per annual period	No proposed changes	5. Relocate the existing Greenfields Landfill to a new location approximately 50 m south from the original location (approved within the existing licence L8249/2008/2) to align the landfill with the current mine site design.
			For noting:
			The licence holder has stated that:
			 the Greenfields Landfill location approved within the existing licence L8249/2008/2 has not been used as a landfill facility to date; and
			 there will be no additional changes required for the Greenfields Landfill and it will be operated as currently approved.
			 The department notes that operational requirements of the landfill facility are already covered within the existing licence L8249/2008/2 and therefore will not be re-assessed as part of this licence amendment application.

2.3 Mining Proposal

The licence holder advised that mining proposals to incorporate the proposed operations were being submitted to the Department of Mines, Industry Regulation and Safety (DMIRS).

On 4 July 2022, DMIRS advised that a revision to Mining Proposal (Registration ID: 101640) (MP 101640) was approved on 1 June 2022.

2.4 Clearing Permit

The applicant advised that there will be a small amount of clearing/grubbing required to construct the dewatering pipelines and that a clearing permit, CPS No: 9513/1 has been submitted to DMIRS. This application is currently under assessment.

The Delegated Officer notes that this licence amendment does not authorise any clearing activities to be undertaken. The applicant must seek the appropriate approvals for any proposed clearing of native vegetation.

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 2020b).

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 operations which have been considered in this amendment report are detailed in

Table 2 below.

Table 2 also details the proposed control measures the licence holder has proposed to assist in controlling these emissions, where necessary.

Table 2: Proposed applicant controls

Emission	Sources	Potential pathways	Proposed applicant controls
Construction			
Dust	Movement of mobile equipment (e.g. light vehicles and heavy equipment)	Air/Wind dispersion	 If required, water will be applied to roads and trafficked surfaces and stockpiles to minimize dust generation; and Avoid the above where possible in unfavorable prevailing environmental conditions.
Sediment laden stormwater	Loose material (sediment) during construction/installation of pipeline bunding (v-	Overland runoff	No proposed controls.

Emission	Sources	Potential pathways	Proposed applicant controls
	drains)		
Operations			
Hydrocarbons (e.g. hydraulic oil or diesel) and chemicals	Operation of mobile equipment (e.g. light vehicles, heavy equipment, generators and dewatering pumps)	Spills or leaks, overflow during filling and/or breach of containment, resulting in direct discharge/overland flow to soil/sediment and infiltration to groundwater	 Stored in self-bunded fuel storage tanks Lubricants and waste oil will be contained within portable bunding Spill kits will be placed at the refueling area and in-service vehicles and staff will be trained in the proper use of the kits. Focus will ensure all Hydrocarbons will be managed in accordance with the internal EMS, procedures and management plans.
Mine dewater (saline to hypersaline)	Mine dewater stored in pits used for dust suppression	Overspray or runoff from dust suppression operations (e.g. action of spraying saline to hypersaline water)	No proposed controls.
	Disposal of mine dewater to new discharge pit and dams	Seepage of mine dewater through base and walls of pit and dams to soil and groundwater	Will continue to monitor and report groundwater (GW) quality to DWER as required by current licence Nearest monitoring bore to CNX Pit is TMHMB05 located approximately 350 south-east. Monitoring bores SEEP6, SEE9 and GAM12 within 200m east from Gravity Dam No monitoring bores located close to Process water pond. Process water pond and Gravity Dam discharge locations are lined with HDPE
		Overtopping of mine dewater from receiving pit / Gravity Dam and Processing water pond.	Gravity Dam and Processing water pond will maintain a minimum freeboard of 500mm and inspected regularly. CNX Pit will maintain a minimum freeboard of 4m and inspected regularly.

Emission	Sources	Potential pathways	Proposed applicant controls
			Response by Focus to informal request for information dated 25/8/22. Focus provided further information regarding Capacity of discharge locations:
			Dewater from Greenfields pit will be used as the water in the processing circuit which requires approximately 4931kL/ day or 1.8 million kL/year – exceeding approximate dewater volume of 400,000kL from Greenfields over 15 months.
			Gravity Dam and Process Dam are part of the processing circuit
			Current capacities of receiving locations are:
			- CNX Pit: 170,944 kL
			- Gravity Dam: 14,238kL
			- Process Dam: 1,738kL
			Focus advised that should the processing circuit cease, CNX pit will be used on a temporary basis.
		Mine dewater discharged to environment via pipeline leak/rupture	 Dewatering pipeline will be bunded and buried (in sections) Dewatering pipeline will have shutoff valves and/or bypass valves and inspected regularly

3.1.2 Receptors

In accordance with the *Guideline: Risk assessments* (DWER 2020b), the Delegated Officer has excluded employees, visitors and contractors of the licence 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 3 below provides a summary of potential human and environmental receptors that may be impacted as a result of activities upon or emission and discharges from the prescribed premises (*Guideline: Environmental siting* (DWER 2020a)).

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

Sensitive receptors	Distance from prescribed premises activities	Pathway assessment		
Human receptor	Human receptors			
Coolgardie Town	Approximately 3 km south-south-west of the proposed mine dewatering activities. Distances of category 6 (mine dewatering activities) to closest sensitive land uses is sufficient to inform that project activity impacts as not foreseeable. Human receptors are not considered to be impacted during construction or operations and therefore not further considered in the risk assessment.	None.		
Environmental r	eceptors			
Surface water bodies	 Salt lakes system (Brown Lake) located approximately 6 km east of the prescribed premises. Given the distance between the salt lake system and proposed dewatering operations, the salt lake system is not considered to be impacted during construction activities or operations and therefore not further considered in the risk assessment. Ephemeral creek lines: An ephemeral creek line located immediately south of Greenfields Pit and approximately 350 m south of Greenfields Landfill; An ephemeral creek line located approximately 1 km north-east of Greenfields Pit and Greenfields Landfill; and An ephemeral creek line located approximately 800 m south-west of Gravity Dam and 1 km south of CNX Pit. The ephemeral creek lines in the region are dry for most of the year, only flowing briefly immediately following significant rainfall. 	Potential impacts to surface water quality (ephemeral creek lines) via: • Overtopping of mine dewater (saline to hypersaline) stored within Gravity Dam / Process Dam and CNX Pit; and • Discharges of mine dewater (saline to hypersaline) from pipeline ruptures or leaks.		
Groundwater	Premises is located within the Goldfields Groundwater Area proclaimed under <i>Rights in Water and Irrigation Act 1914</i> . Groundwater is hypersaline with 14,000 to 35,000 total dissolved solids (TDS) (DWER Geocortex).	Operations Potential impacts to groundwater quality via: • Seepage of mine dewater (saline to hypersaline) through base and walls of		

Sensitive receptors	Distance from prescribed premises activities	Pathway assessment
•	Groundwater generally flows in an easterly direction (Focus 2022).	pits /dams (Gravity Dam and CNX Pit) to soil and
	The original groundwater levels at the premises are unrecorded. Water level data collected in 2009 from the nearest water monitoring bores approximately 300 m north and south from the Greenfields Pit, recorded groundwater levels of approximately 371 and 391 mAHD (10 to 30 m below the pit crest) (Focus 2022).	groundwater, which can potentially lead to groundwater mounding/impacts to groundwater quality;
	Greenfields Pit	
	Groundwater quality monitoring of monitoring bores (TMHWB10 and TMHWB11 – May 2021) located adjacent to Greenfields Pit demonstrates:	
	 Neutral at pH 6.8 to 7.78; 	
	Hypersaline at 44,000 to 75,000 mg/L TDS; and	
	Enriched in manganese and nickel.	
	Groundwater monitoring of monitoring bores (TMHWB10 and TMHWB11 – May 2022) located adjacent to Greenfields Pit demonstrates:	
	Neutral at pH 7.3 to 7.9; and	
	• Saline at 30,000 to 34,000 mg/L TDS.	
	Standing water levels (SWL) of 16.3 to 22.4 meters below ground level (mbgl)	
	Gravity Dam	
	Groundwater monitoring data from bores (SEEP6; SEEP9 and GAM12) located within 200 m east of Gravity Dam demonstrates:	
	• SWL from 18.66 to 19.83 mbgl;	
	Neutral at pH 7.7 to 7.8; and	
	• Saline at 11,000 to 17,000 mg/L TDS.	
	Bore GAM12 was dry with no data between 2020-2022.	
	CNX Pit	
	Groundwater monitoring bore TMHWMB05 located approximately 350 m south-east of CNX Pit demonstrated a standing water level (SWL) of 15.25 metres below ground level (mbgl) in May 2021 (Focus 2021).	
	Monitoring between February 2021 and 2022 demonstrates:	
	Neutral at pH 7 to 7.5;	
	 Hypersaline at 53,000 to 56,000 mg/L TDS; 	

Sensitive receptors	Distance from prescribed premises activities	Pathway assessment
	and	
	Enriched in manganese.	
	<u>Dreadnought Pit</u>	
	Groundwater quality monitoring of monitoring bore (DNRC001 – February 2022) located at Dreadnought Pit demonstrates:	
	Slightly alkaline at pH 8;	
	Saline at 7,500 mg/L TDS; and	
	Big Blow Pit	
	Groundwater quality monitoring of monitoring bores (BBRC001 and BBRC002 – February 2022) located at Big Blow Pit demonstrates:	
	Neutral at pH 7.7;	
	Hypersaline at 13,000 to 26,000 mg/L TDS; and	
	Enriched in manganese and iron	
	Groundwater is abstracted and used onsite for mineral processing and dust suppression. Groundwater abstraction is permitted under licence GWL160936(5) and GWL 205789(1) to provide safe mining conditions below the water table.	
Threatened / Priority flora	A desktop assessment and field survey undertaken by Terratree Pty Ltd determined that no Threatened or Priority flora or ecological communities were recorded as being present within the survey area (Terratree 2019).	None.
	The following conservation significant flora species have previously been sighted around the prescribed premises (DWER Geocortex):	
	Acacia websteri (P1) 1.1km north-west from the nearest premised activity;	
	Eremophila veronica (P3) 1.3km north-west to nearest prescribed activity;	
	Gastrolobium graniticum (Threatened) 1.5km to nearest prescribed activity; and	
	Phlegmatospermum eremaeum (P1) to the west of the prescribed premises boundary.	
DBCA Legislated Tenure	Kangaroo Hills Timber Reserve (<i>Conservation</i> and Land Management Act 1984) < 200m west from the prescribed premises boundary. > 1km from nearest prescribed activity.	None.
Native vegetation	The survey area is dominated by Eucalypt Mallee Woodlands and Open Woodlands with small areas of Mallee Shrublands and one	Construction The following can potentially

Sensitive receptors	Distance from prescribed premises activities	Pathway assessment
	Isolated Eremophila Heathland (Terratree 2019).	lead to poor native vegetation health:
		Air/wind dispersion (dust) during construction activities; and
		Overland runoff (sediment laden stormwater).
		Operations
		The following can potentially lead to poor native vegetation health:
		Overspray or runoff from dust suppression operations (e.g. action of spraying saline to hypersaline water);
		Seepage of mine dewater (saline to hypersaline) through base and walls of pits to soil and groundwater, which can potentially lead to groundwater mounding; and
		Discharges of mine dewater (saline to hypersaline) from pipeline ruptures or leaks.
Threatened / Priority fauna	Western Ecological undertook a desktop assessment and field survey in 2020, which identified four fauna species of conservation significance. One species (Malleefowl, <i>Leipoa ocellata</i>) is considered as Possibly occurring and three are considered Unlikely to occur in the survey area (Focus 2022).	None.
	The following conservation significant fauna species have previously been sighted (DWER Geocortex):	
	 Malleefowl, Leipoa ocellata (considered Threatened - Vulnerable at a State level and Vulnerable at a Federal level) – sightings approximately 1.5 km north-north-west and 2 km north-north-east of CNX Pit. Sightings range from 2013 to 2016. 	
	No evidence of significant fauna species (including Malleefowl) were observed during the field survey undertaken by Western Ecological (Focus 2022).	
	The survey did identify a total of approximately 134 ha of Eucalyptus Woodland and Acacia Shrubland that are dense enough to be suitable for Malleefowl and provide adequate shelter and	

Sensitive receptors	Distance from prescribed premises activities	Pathway assessment
	suitable vegetation, as well as sandy soils for Malleefowl to construct mounds (Focus 2022).	
	The department notes that the proposed new dewatering pipelines and mine dewater disposal pits (Gravity Dam and CNX Pit) are greater than 600 m away from potential Malleefowl habitats.	
	Siting of inland hairstreak butterfly <i>Jalmenus</i> aridus P1 fauna in the southern section of the prescribed premises (Focus 2022).	
	Considering the above, threatened fauna are not considered to be impacted during construction activities or operations and therefore not further considered in the risk assessment.	
Native fauna	A total of 40 fauna species from 26 families were recorded in the survey area. All fauna species recorded are considered relatively common and widespread (Focus 2022).	Native fauna gaining access to CNX Pit and Gravity / Process Dam where mine dewater is discharged.
		For noting:
		Hypersalinity (>50,000 mg/L TDS) provides a natural barrier for wildlife exposure to the mine dewater because at this salinity the solutions are outside the physiologically safe drinking range of wildlife and wildlife seek to avoid its ingestion while foraging (MERIWA 2008).
		Considering the above, this receptor is not considered to be impacted during operations and therefore not further considered in the risk assessment.

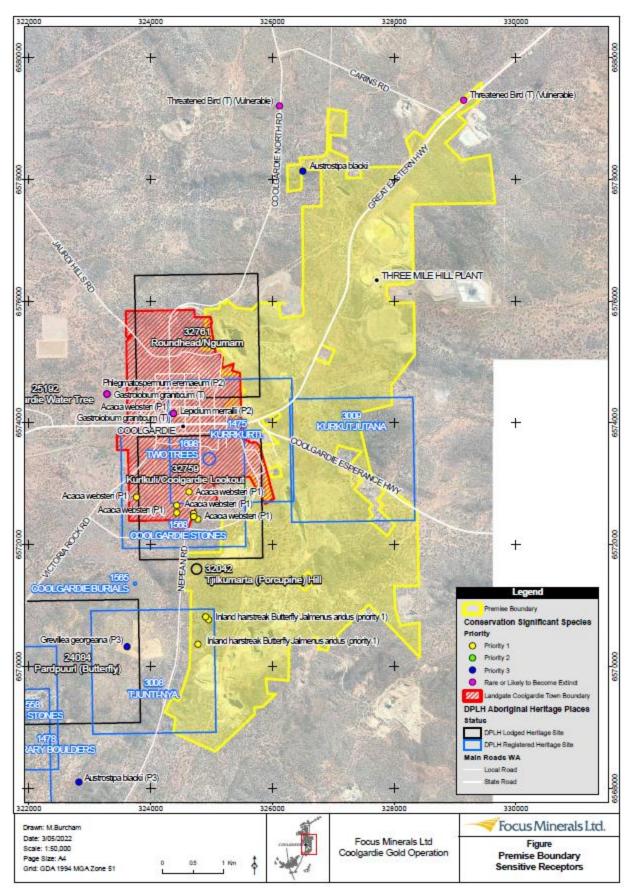


Figure 1: Distance to sensitive receptors

3.2 Risk ratings

Risk ratings have been assessed in accordance with the *Guideline: Risk Assessments* (DWER 2020b) for those emission sources which are proposed to change 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 licence 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 licence holder's proposed controls to be critical to maintaining an acceptable level of risk, these will be incorporated into the licence as regulatory controls.

Additional regulatory controls may be imposed where the licence holder's controls are not deemed sufficient. Where this is the case the need for additional controls will be documented and justified in Table 4.

The revised licence L8249/2008/3 that accompanies this amendment report authorises emissions associated with the construction and operation of the premises i.e. category 6 activities.

The conditions in the revised licence have been determined in accordance with Guidance Statement: Setting Conditions (DER 2015).

Table 4. Risk assessment of potential emissions and discharges from the premises during construction and operations

Risk Event						Risk rating ¹	Licence			
Source/Activities	Potential emission	Potential pathways	Potential adverse impacts	Receptors	Licence Holder's controls	C = consequence L = likelihood	Holder's controls sufficient?	Conditions ² of licence	Justification for additional regulatory requirements	
Construction										
Movement of mobile equipment (e.g. light vehicles and heavy equipment) Activities: Construction and installation of dewatering infrastructure including pipeline bunding	Dust	Air/Wind dispersion				C = Slight L = Unlikely Low Risk	Y	Existing Condition 2.3: fugitive dust measures	The Delegated officer considers the risk of this emission to be sufficiently managed by applicant's proposed controls and existing licence conditions.	
Source: Loose material (sediment) during construction of pipeline bunding Activities: Stormwater migrating through construction areas	Stormwater (sediment laden)	Overland runoff	Impacts to native vegetation health	Native vegetation	Refer to section 3.1	C = Minor L = Unlikely Medium Risk	N/A	Existing Condition 1.2.5: preventing contamination of stormwater	The Delegated Officers considers the risk to be sufficiently managed by current existing licence conditions.	

Risk Event	Risk Event						Licence			
Source/Activities	Potential emission	Potential pathways	Potential adverse impacts	Receptors	Licence Holder's controls	C = consequence L = likelihood	Holder's controls sufficient?	Conditions ² of licence	Justification for additional regulatory requirements	
Operations										
Source: • Mine dewater stored	from		Reduced quality or contamination of soil. Soil acidity, sprayed surfaces may	Native vegetation		C = Minor L = Unlikely Medium Risk		Existing Condition	Approximately 50,000kL of dewater from Dreadnought Pit over 6 months and 2,820kL of dewater from Big Blow Pit over 3 months, will be used for dust suppression. After comparing water quality of pit water to ANZECC (2000) short term irrigation guidelines, neither pits have exceeding levels of salinity or pH recommended for dust suppression purposes. Iron and	
in pits Activities: Use of mine dewater for onsite dust suppression	Dreadnough t Pit and Big Blow Pit (saline to hypersaline) used for dust suppression	from dust suppression operations (e.g. action of spraying saline to hypersaline water)	become dispersive, causing increased erosion/sedimen tation Impacts to native vegetation health	Soil / Native Vegetation	Refer to section 3.1	C = Slight L = Possible Low Risk	N/A	1.3.2: dust suppression to minimize damage to surrounding vegetation	Manganese levels were exceeded in water samples associated with Big Blow Pit. Manganese levels ranged from 280-750mg/L (ANZECC level 10mg/L) and Iron levels ranged from 210-3200mg/L (ANZECC level 10mg/L). Noting that these ANZECC values are for irrigation purposes, and this dewater will be used for dust suppression on road hauls/predisturbed land, the Delegated Officer has determined that the risk does not warrant further regulatory controls and will be adequately managed by existing licence conditions.	
Source: Disposal of mine dewater to discharge locations	Mine dewater (saline to hypersaline)	Seepage of mine dewater through base and walls of CNX pit to soil and groundwater	Reduced quality or contamination of groundwater, soil, and/or sediment	Groundwater	Refer to section 3.1	C = Minor L = Unlikely Medium Risk	Y	Existing Condition 2.2.2: freeboard limit Existing Condition 3.2.1: Monitoring emission to land	Water quality from CNX and Greenfields Pit were determined using data from nearby monitoring bores. There was only a slight variation in recorded salinity (TDS) and pH values, indicating that water quality of the two pits are similar. The discharge into CNX is a secondary dewatering option (as the dewater is planned to be used in the processing plant first (Gravity and Process Dams), and therefore the expected volume to be	

Risk Event							Licence		
Source/Activities	Potential emission	Potential pathways	Potential adverse impacts	Receptors	Licence Holder's controls	C = consequence L = likelihood	Holder's controls sufficient?	Conditions ² of licence	Justification for additional regulatory requirements
			Groundwater mounding Impacts to native vegetation health	Soil/Sediment Native vegetation (located within any areas of groundwater mounding)		C = Moderate L = Unlikely Medium Risk			discharged into the pit is low The nearest monitoring bore located 350m south-east of CNX pit recorded a SWL of 15.25 mbgl. Due to the depth of groundwater near the CNX pit and the existing freeboard limit (condition 2.2.2) for CNX pit it is unlikely that groundwater mounding impacts will occur. Current licence conditions are sufficient to manage this risk.
		Overtopping of mine dewater from Gravity Dam and Process water Dam	Reduced quality or contamination of soil, sediment, groundwater and/or surface water Soil acidity, impacted areas may become dispersive, causing increased	Soil/Sediment Native vegetation	Refer to section 3.1	C = Minor L = Unlikely Medium Risk	Y	Existing Condition 1.3.3: Containment infrastructure Existing Condition 1.3.4: freeboard limit of 500mm for containment infrastructure	Capacity of Process water Dam and Gravity Dam (refer to section 3.1.1) have been reviewed and are acceptable based on Focus' intention to divert majority of the 400,000kL of water from Greenfields Pit to be used for processing and therefore will be only temporarily stored within the Dams prior to this use. Focus have stated that 4931kL/ day or 1.8 million kL/year will be diverted for processing purposes which exceeds the expected volume of dewater. Due to the use of the dewater for processing and the existing dam freeboard condition (condition 1.3.4), the Delegated Officer considers the risk will be sufficiently managed.
		Overtopping of mine dewater from CNX pit	erosion/sedimen tation Impacts to native vegetation health			C = Minor L = Rare Low Risk	Y	Existing Condition 2.2.2: Freeboard limits for CNX Pit	The capacity of the pit (refer to section 3.1.1) has been reviewed and considering that dewatering into CNX is a contingency option only to be utilised if water needs for processing are reduced/momentarily halted, the Delegated Officer has determined the risk to be low. Existing freeboard limit have been determined to sufficiently manage the risk, and no additional regulatory controls are required.

Risk Event						Risk rating ¹	Licence		
Source/Activities	Potential emission	Potential pathways	Potential adverse impacts	Receptors	Licence Holder's controls	C = consequence L = likelihood	Holder's controls sufficient?	Conditions ² of licence	Justification for additional regulatory requirements
Source: Disposal of mine dewater to CNX pit and dams Activities: Dewatering Greenfields Pit		Mine dewater discharged	cro (Ic		Refer to section 3.1 C = Slight L = Unlikel	C = Minor L = Unlikely Medium Risk	Existing Condition 1.3.1: pipeline operational requirements Existing Condition	The Delegated officer considers this risk to be sufficiently managed by the applicant's proposed controls and existing licence conditions.	
Source: Disposal of mine dewater to pits Activities: Dewatering Dreadnought Pit and Big Blow Pit for dust suppression		to environment via pipeline leak/rupture				C = Slight L = Unlikely Low Risk	Y	Existing Condition 1.3.6: pipeline inspection New Condition 1.4.1: construction requirements for pipeline	As the location of these pipelines are located within the footprint of the pit bund, the Delegated Officer consider the risk to be low, and no additional regulatory conditions are required.

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

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 (30/06/22) and in West Aus 04/07/22	None received	N/A
Local Government Authority advised of proposal 1 July 2022	None received	N/A
DMIRS advised of proposal on 1 July 2022	DMIRS replied on date stating that MP 101640 was approved on 1 June 2022 for the following: Expansion of the Greenfields WRD into the TMH	Noted.
	North WRD and expansion of the TMH North WRD Expansion of the existing Greenfields Pit on	
	 tenement M15/154 Creation of an abandonment bund on tenements M15/154, M15/645 and M15/1836 	
	Stockpiling of topsoil and vegetation for progressive rehabilitation practices	
	Restarting of the TMH Plant	
	Expansion of existing haul roads	
	Associated supporting activities.	
DPLH advised of proposal on 1 July 2022	Location of Premises boundary intersects with the actual boundaries of Aboriginal site ID 3009 (Kurkutjutana) and Aboriginal heritage places ID 32042 (Tjilkumarta (Porcupine) Hill) and ID 32761 (Roundhead/Ngumarn)	Noted.
	Based on information held by DPLH, approvals under the <i>Aboriginal Heritage Act 1972</i> are required	
	Premises boundary is located within the boundary of Marlinyu Ghoorlie and Maduwongga Native Title Claim areas, and that Focus commits to work with both Native Title Claim groups and obtain all necessary approvals under the Aboriginal Heritage Act 1972 to ensure Aboriginal heritage sites are identified and protected.	
Licence holder was provided with draft amendment on 31 September 2022	Licence Holder provided a response on 6 September 2022, providing comments and suggested changes to minor details / text within the draft documents.	These comments were noted by the department and suggested changes consolidated into the final documents.

5. Conclusion

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

The expiry date on the licence has also been extended in line with DWER's *Guideline: Licence Duration*.

5.1 Summary of amendments

Table 6 provides a summary of the proposed amendments and will act as record of implemented changes. All proposed changes have been incorporated into the revised licence as part of the amendment process.

Table 6: Summary of licence amendments

Relevant section or condition No.	Proposed amendments
Cover page	- Updated expiry from 28 September 2022 to 28 September 2042 in line with DWER's Guideline: Licence duration
	- Changes to premises details to include mining tenement M15/1788 and miscellaneous licence L15/161
Licence history	Changes to Instrument Log to include current amendment.
Condition 1.3.3	Changes to Table 1.3.1 include 'mine dewater' as a material for the Process water pond containment infrastructure.
Condition 1.4	Addition of construction requirements.
Condition 1.4.1 and Table 1.4.1	Addition of construction table for dewatering infrastructure.
Condition 1.4.2	Addition of construction condition.
Condition 1.4.3	Addition of construction condition.
Condition 2.2.1	Changes to Table 2.2.1 to include infrastructure location column.
	Changes to Table 2.2.1 to include 'water from Greenfields Pit' as a source of emission for CNX Pit
Condition 2.2.2	Changes to Table 2.2.2 to adjust limit value to be an accurate representation of the assessed limit.
Condition 4.4.1	Removed improvement condition as required Groundwater Management Plan has been submitted to the Department.
-	Inclusion of Maps for new proposed Pipeline Infrastructure and updated Greenfields landfill Map
	- Updated Figures
Schedule 2	Addition of design drawings from existing plant infrastructure layout

Table 7: Consolidation of licence conditions in this amendment

Existing condition	Condition summary	Revised licence condition	Conversion notes
N/A	Front cover	N/A	Revised to current licensing format.
N/A	Contents	N/A	Redundant. Revised to current licensing format.
N/A	All Table Captions	N/A	New table formatting revised to current licensing format.
2.2	Point source emissions to air	N/A	Redundant condition. Revised to current licensing format.
2.3	Point source emissions to surface water	N/A	Redundant condition. Revised to current licensing format.
2.4	Point source emissions to groundwater	N/A	Redundant condition. Revised to current licensing format.
2.5	Emissions to land	Condition 2.2	New numbering.
2.5.1	Emissions to land	Condition 2.2.1 and Table 2.2.1	New numbering.
2.5.2	Emission limits to land	Condition 2.2.2 and Table 2.2.2	New numbering.
2.5.3	Emission targets to land	Condition 2.2.3 and Table 2.2.3	New numbering.
2.6	Fugitive emissions	Condition 2.3	New numbering.
2.6.1	Fugitive emissions	Condition 2.3.1	New numbering.
2.6.2	Fugitive emissions	Condition 2.3.2	New numbering.
2.7	Odour	N/A	Redundant condition. Revised to current licensing format.
2.8	Noise	N/A	Redundant condition. Revised to current licensing format.
3.2	Monitoring of point source emissions to air	N/A	Redundant condition. Revised to current licensing format.
3.3	Monitoring of point source emissions to surface water	N/A	Redundant condition. Revised to current licensing format.
3.4	Monitoring of point source emissions to groundwater	N/A	Redundant condition. Revised to current licensing format.
3.5	Monitoring of emissions to land	Condition 3.2	New numbering.
3.5.1	Monitoring of emissions to land	Condition 3.2.1 and Table 3.2.1	New numbering.
3.6	Monitoring of inputs and outputs	N/A	Redundant condition. Revised to current licensing format.

Existing condition	Condition summary	Revised licence condition	Conversion notes
3.7	Process monitoring	Condition 3.3	New numbering.
3.7.1	Process monitoring	Condition 3.3.1 and Table 3.3.1	New numbering.
3.8	Ambient environmental quality monitoring	Condition 3.4	New numbering.
3.8.1	Ambient environmental quality monitoring	Condition 3.4.1 and Table 3.4.1	New numbering.
3.8.2	Ambient environmental quality monitoring	Condition 3.4.2	New numbering.
3.8.3	Ambient environmental quality monitoring	Condition 3.4.3	New numbering and updated numbering convention to be consistent throughout document.
3.9	Meteorological monitoring	N/A	Redundant condition. Revised to current licensing format.
5.1.1	Records	4.1.4	New numbering and update to wording format.
5.1.2	Records	N/A	Redundant condition. Revised to current licensing format.
5.1.3	Records	4.1.2	New numbering and update to wording format.
5.1.4	Records	4.1.1	New numbering and update to wording format.
-	Records	4.1.3	New records condition as per the revised licence format.
-	N1 forms	Schedule 3	Revised licence formatting
Throughout licence	Updated from "Licensee" to "licence holder" Updated from "shall" to "must" Updated from "per year" to "annual period"	-	Revised licence formatting
Tables	Updated Table formatting	-	Revised licence formatting.

References

- 1. Australian and New Zealand Environment and Conservation Council (ANZECC) 2000, Australian and New Zealand Guidelines for Fresh and Marine Water Quality: The Guidelines, Australia.
- 2. Department of Environment Regulation (DER) 2015, *Guidance Statement: Setting Conditions*, Perth, Western Australia.
- 3. Department of Environment Regulation (DER) 2016, *Guidance Statement: Licence Duration*, Perth, Western Australia.
- 4. Department of Water and Environmental Regulation (DWER) 2020a, *Guideline: Environmental siting*, Perth, Western Australia.
- 5. Department of Water and Environmental Regulation (DWER) 2020b, *Guideline: Risk* assessments, Perth, Western Australia.
- 6. Environmental Protection (Unauthorised Discharges) Regulations 2004.
- 7. Focus Minerals Limited (Focus) 2021, *Annual Environmental Report, July 2020 to June 2021*, East Perth, Western Australia.
- 8. Focus 2022, *Licence Renewal Application L8249/2008/2, Three Mile Hill Gold Project*, East Perth, Western Australia

Appendix 1: Application validation summary

SECTION 1: APPLICATION SUMM	ARY						
Application type							
Renewal	\boxtimes	Current licence number:	L8249/2008/2				
Amendment to licence	\bowtie	Current licence number:	L8249/2008/2				
Amendment to licence		Relevant works approval number:		N/A	\boxtimes		
Date application received		4 May 2022					
Applicant and Premises details							
Applicant name/s (full legal name/s)		Focus Operations P	ty Ltd				
Premises name		Three Mile Hill Gold	Project				
Premises location	The premises will cover mining tenements M15/1114, M15/154, M15/645, M15/646, M15/660, M15/958, M15/1294, M15/1432, M15/1788 and L15/161. PMB3 Coolgardie WA 6429						
Local Government Authority		Shire of Coolgardie					
Application documents		,					
HPCM file reference number:	2011/005901-2						
Key application documents (addition application form):	al to	 Supporting information (DWERDT598737) Updated premises maps (DWERDT598732 and DWERDT598735) 					
Scope of application/assessment							
		Licence renewal 1. Extend licence for a period of 20 years (new expiry date of 2042)					
		Licence amendment					
		Updates to prescribed premises boundaryThe licence holder is applying to add the following mining tenements to the existing prescribed premises boundary:					
Summary of proposed activities or changes to existing operations.		M15/1788; andL15/161.					
		 Construction Construction of new dewatering infrastructure: Greenfields Pit to the Gravity Dam to the Process Pond; and Greenfields Pit to CNX Pit. Updates to existing operations 					

Category 6 (mine dewatering) – new dewatering points proposed:

Greenfields Pit:

Dewater approximately 400,000 kL of mine dewater from the Greenfields Pit over a 15-month period prior to commencement of mining:

- Greenfields Pit into the Gravity Dam and then to the Process Dam; and
- b. Greenfields Pit to CNX Pit.

Note:

The licence holder 's preferred option will be to dewater into the Gravity Dam and then into the Process Pond for direct use in the Mill.

The existing licence L8294/2008/2 demonstrates that Gravity Dam is lined with HDPE liner to achieve a permeability of 10⁻⁹ m/s.

Excess mine water will be discharged into the CNX pit.

5. Dreadnought Pit:

Dewater approximately 50,000 kL of mine dewater from the Dreadnought Pit over a 6-month period in 2022/2023:

- Mine dewater within Dreadnought Pit pumped via a submersible pump to standpipe located within the pit bund; and
- b. Water trucks will then fill up from the standpipe as required and mine dewater used in dust suppression activities within the prescribed premises boundary.

Note:

It is estimated approximately 141,000 kL of mine water is currently stored within the Dreadnought Pit.

If additional dewatering is required to be dewatered. The licence holder will ensure dewatering volumes remain within licence limits.

6. Big Blow Pit:

Dewater approximately 2,800 kL of mine dewater from the Big Blow Pit over a three-month period:

- Mine dewater within Big Blow Pit pumped via a submersible pump to standpipe located within the pit bund; and
- b. Water trucks will then fill up from the standpipe as required and mine dewater used in dust suppression activities within the prescribed premises boundary.

Note:

If additional dewatering is required to be dewatered. The licence holder will ensure dewatering volumes remain within licence limits or will seek an amendment to licence L8249.

Category 89 (putrescible landfill site):

7. Relocate the existing Greenfields Landfill to a new location approximately 50 m south from the original location (approved

within the existing licence L8249) to align the landfill with the current mine site design. Note: The licence holder states that The approved Greenfields Landfill location within the existing licence L8249 has not been used as a landfill facility to date; and There will be no additional changes required for the Greenfields Landfill and it will be operated as currently approved. The Licensing Officer notes that operational requirements of the landfill facility are already covered within the existing licence L8249 and therefore will not be re-assessed as part of this licence amendment application. Undertake operations of infrastructure incidental to prescribed premises activities including: Fuel storage and refuelling. The Licensing Officer notes that the existing licence L8249 does include requirement to undertake these activities, therefore these will be assessed as part of the licence amendment and additional regulatory requirements applied as required. Category number/s (activities that cause the premises to become prescribed premises) Table 1: Prescribed premises categories Prescribed premises category Assessed production Proposed changes to the production or and description or design capacity design capacity (amendments only) **Existing operations** Category 5: Processing or 1.5 million tonnes per No change beneficiation of metallic or nonyear metallic ore: Category 6: Mine dewatering 475,000 kL per year No change Category 89: Putrescible landfill 2,500 tonnes per year No change Legislative context and other approvals Has the applicant referred, or do Yes □ No ⊠ N/A they intend to refer, their proposal to the EPA under Part IV of the EP Act as a significant proposal? Does the applicant hold any Yes □ No ⊠ N/A existing Part IV Ministerial Statements relevant to the application? N/A Has the proposal been referred Yes □ No ⊠

Licence: L8249/2008/3

and/or assessed under the EPBC

Act?		
Has the applicant demonstrated occupancy (proof of occupier status)?	Yes ⊠ No □	Mining lease / tenement ⊠ • M15/1114 – Expiry: 14/02/2043 • M15/154 – Expiry: 02/04/2027 • M15/645 – Expiry: 25/03/2035 • M15/660 – Expiry: 25/03/2035 • M15/958 – Expiry: 14/04/2026 • M15/1294 – Expiry: 28/03/2043 • M15/1432 – Expiry: 30/09/2024 • M15/1788 – Expiry: 15/07/2031 • L15/161 – Expiry: 15/02/2023
Has the applicant obtained all relevant planning approvals?	Yes □ No □ N/A ⊠	N/A Premises located on mining tenements
Has the applicant applied for, or have an existing EP Act clearing permit in relation to this proposal?	Yes ⊠ No □	CPS No: 9513/1 Clearing application currently under assessment The licence holder has stated that: There will be a small amount of clearing/grubbing required to construct the dewatering pipelines; and Any native vegetation clearing for the proposed pipeline will fall under clearing permit application CPS9531/1, which has been submitted and pending approval by DMIRS.
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 □	Application reference No: N/A Licence/permit No: GWL160936(5) and GWL 205789(1)
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: N/A

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 ⊠
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 □	 Aboriginal Heritage Act 1972 Environmental Protection (Controlled Waste) Regulations 2004 Environmental Protection (Noise) Regulations 1997 Environmental Protection (Unauthorised Discharge) Regulations 2004 Dangerous Goods Safety Act 2004 Mining Act 1978 Rights in Water and Irrigation Act 1914
Is the Premises within an Environmental Protection Policy (EPP) Area?	Yes □ No ⊠	N/A
Is the Premises subject to any EPP requirements?	Yes □ No ⊠	N/A
Is the Premises a known or suspected contaminated site under the Contaminated Sites Act 2003?	Yes ⊠ No □	Classification: Contaminated – remediation required (C–RR) Date of classification: 4 September 2018