Government of Western Australia
Department of Water and Environmental Regulation

Decision Report

Application for Works Approval

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

Works Approval Number	W3043/2025/1
Applicant	Saturn Metals Limited
ACN	619 488 498
File number	APP-0027536
Premises	Apollo Hill Pilot Project Mining tenements: M31/486, M39/296, L31/93, L39/284 As defined by the premises map attached to the issued works approval
Date of report	6 November 2025
Decision	Works approval granted

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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 time limited operation of the premises. As a result of this assessment, works approval W3043/2025/1 has been granted.

2. Scope of assessment

2.1 Regulatory framework

In completing this assessment, the Department of Water and Environmental Regulation (the department; DWER) has considered and given due regard to its regulatory framework and relevant policy documents available at https://dwer.wa.gov.au/regulatory-documents.

2.2 Application summary

On 17 February 2025 Saturn Metals Ltd (the applicant) submitted an application for a works approval under section 54 of the *Environmental Protection Act 1986* (EP Act).

The application is to undertake the following activities at the Apollo Hill Gold Project (the premises):

- construction and time limited operations of a heap leaching facility and supporting infrastructure;
- construction and time limited operations of a carbon adsorption facility;
- mobilisation and time limited operations of a crushing, screening and agglomeration plant;
- construction of supporting infrastructure and time limited dewatering operations for two open pits;
- construction and time limited operations of four groundwater monitoring bores.

The premises is situated approximately 650 kilometres (km) north-east of Perth and 50 km south-east of Leonora, in the Goldfields region of Western Australia (Figure 1). Proposed activities will be undertaken within mining tenement M31/486 which forms part of the Glenorn pastoral station.

The premises relates to the categories and associated production / design capacity under Schedule 1 of the *Environmental Protection Regulations 1987* (EP Regulations). Definition of each category is provided on works approval W3043/2025/1 accompanying this decision report. The department has assessed activities and associated infrastructure / equipment in accordance with *Guideline: Risk Assessments* (DWER 2020).

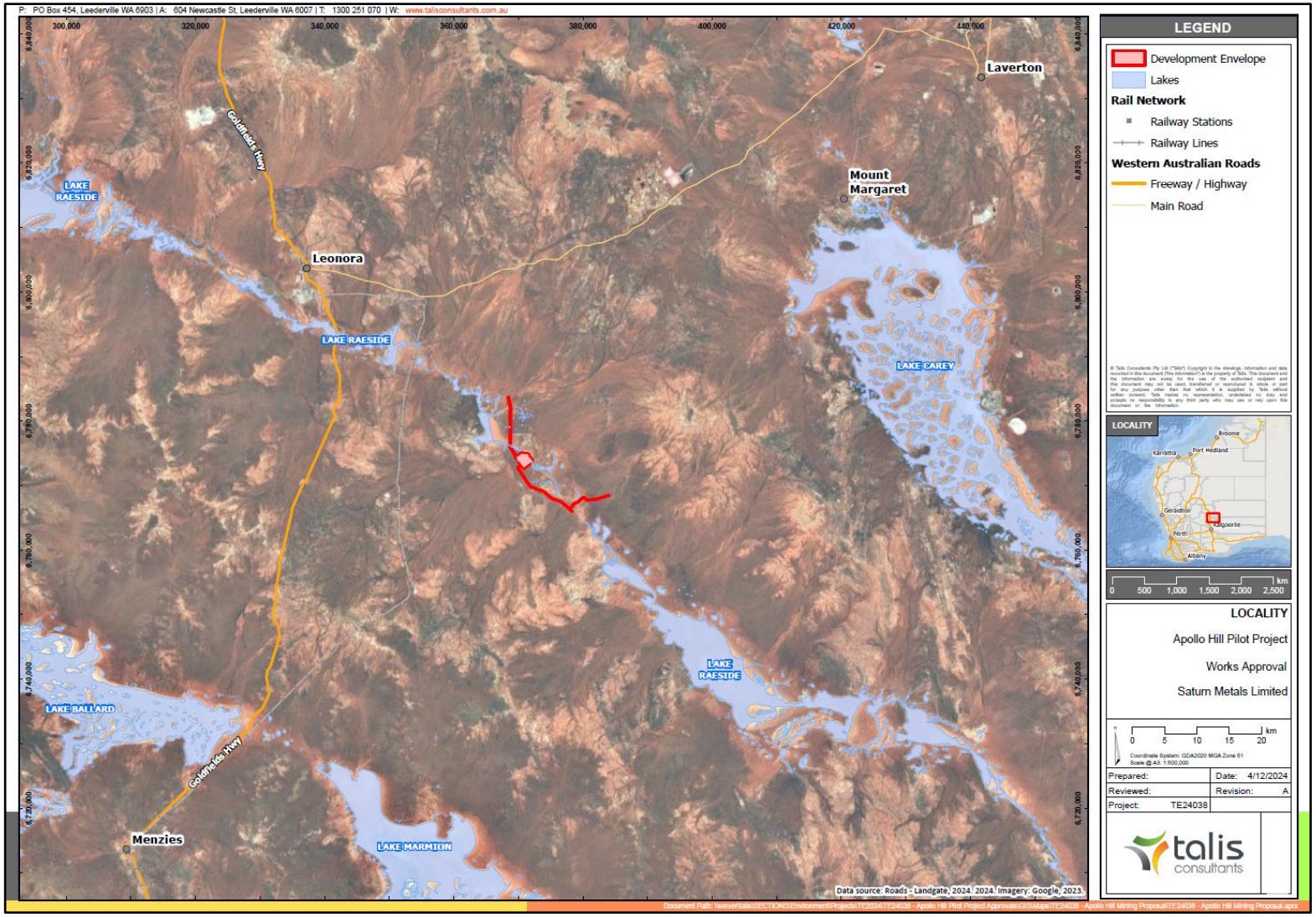

Figure 1: Apollo Hill Project location within the Goldfield region of Western Australia (Talis Consulting, 2025)

2.2.1 Crushing, screening and agglomeration plant

Ore extracted from the open pits will be hauled by trucks and stockpiled on a run-of-mine (ROM) pad located southwest of the operations. From the ROM pad, the ore will be fed to a three-stage crushing and screening circuit comprising of a jaw crusher, a cone crusher and a screening plant.

A grizzly feeder will prevent oversized material from entering the primary crusher chamber. Crushed material from the primary crusher will be conveyed to a sizing screen, with the finer material transferred to a secondary crusher. A high-pressure grinding roll (HPGR) will further reduce the particle size to less than 8 mm.

Lime and cement will then be discharged onto a conveyor from adjacent silos. The feed chute will be equipped with a flake breaker and an automated sampler for consistent agglomeration. Plant operations will be monitored and controlled through automated systems including level sensors, weightometers and programmable logic controllers.

The agglomerated ore will be transferred by conveyor to the heap leach pad.

Dust emissions will be managed using a spray system activated when visible dust is detected. Water carts will also be deployed to suppress dust on surrounding surfaces including stockpiles.

2.2.2 Heap leaching pad and supporting infrastructure

The heap leaching circuit will be located west of the crushing and screening plant, within the southern portion of mining tenement M31/486. The heap leaching pad will measure approximately 312 meters in length and 369 meters in width, divided into five cells, each approximately 283 meters long and 69 meters wide.

Ore will be placed on the heap leach pad by a front-end loader and an automated stacker. The initial lift will reach approximately 8 meters across 5 cells followed by a second lift in a single cell– increasing the heap height by an additional 8 m.

Irrigation will be applied via drippers installed on top of the pad, delivering a cyanide solution that percolates through the ore by gravity. The pad base will consist of a compacted foundation sloping eastward to facilitate solution flow to the drainage layer.

Each cell will include drainage layer of free draining gravel and primary drainage pipes (nominal 100 mm diameter) spaced at a 20-meter interval. The primary pipes will connect to larger secondary pipes directing the solution to launder boxes outside the toe bund. An operator will monitor the launder boxes solution and direct the solution to the pregnant solution or intermediate pond depending on quality.

To prevent seepage, the pad will be lined with a 1.5 mm double-sided HDPE liner overlain by a 300 mm protective layer of fined grained material. Beneath the liner, a 300 mm low permeability compacted material will act as a sub-base. A 500 mm high berm will surround the pad perimeter and divider berms will be constructed around the individual cells.

Excess run-off from rainfall will be directed to a lined stormwater channel and into the stormwater ponds. An upstream catchment channel around the facility will collect surface runoff and direct it away from the processing area. The channel will incorporate erosion protection measures.

The heap leach facility will be designed to contain runoff resulting from a 1 in 100-year average return interval (ARI) rainfall even and will comply with the International Cyanide Management Code (2002).

Process ponds

Three containment ponds will be constructed to support the heap leach facility operations: a pregnant liquor solution (PLS), an intermediate liquor solution (ILS) and a stormwater (SW) pond. All ponds will be excavated below ground level and constructed with non-acid forming mine waste sourced from the premises.

All ponds will be interconnected by a spillway. Excess solution from the PLS pond will be discharged into the ILS pond, with any further overflow directed to the SW pond. The heap leach circuit will be designed to contain a 100-year ARI storm event, and ponds will be engineered in the line with the water balance model to maintain adequate capacity for operational and stormwater requirements.

The PLS and ILS ponds will have identical lining systems, comprising a geonet drainage layer sandwiched between two 1.5 mm double-sided textured HDPE liners. This design will allow any leaked solution to flow laterally through the geonet into a sump, where it will be collected and recovered. Sumps will be positioned just above the bottom HDPE liner. Liners and geonets will be anchored in a perimeter trench around the pond and the entire lining system will be installed over a 200 mm layer of compacted soil.

The SW pond lining structure will have a simpler lining structure consisting of one layer of a 1.5 mm double sided texture HDPE liner over 200 mm of compacted soil. Its base profile will incorporate a depression to function as a sump.

A summary of the ponds' main construction details is shown on Table 1 and proposed liner structure specifications are shown in Figure 2.

The PLS and ILS ponds will contain a combination of the cyanide solution and mine water from dewatering activities. Solution from the PLS pond will be pumped to the gold recovery circuit, while the intermediate pond solution will be recycled back into the leaching cycle. The stormwater pond will contain any runoff from the heap leach facility and any incidental overflow from the PLS and ILS ponds. All ponds will maintain a 300 mm freeboard.

A lined spillway will connect to the SW pond and to manage rainfall exceeding the designed allowance.

Table 1: Containment ponds construction specifications

	Crest level (m RL)	Base level (m RL)	Pond depth (m)	Spillway level (m RL)	Spillway depth (m)	Spillway reports to	Pond liner	Approximate size (m^2)
PLS pond	352.1	347.1	5.0	351.5	0.6	ILS pond	Refer to Figure 1	4900
ILS pond	352.1	347.1	5.0	351.6	0.5	SW pond	Refer to Figure 1	4900
SW pond	352.1	346.6	5.5	351.8	0.3	Spillway for emergency events	Refer to Figure 1	81500

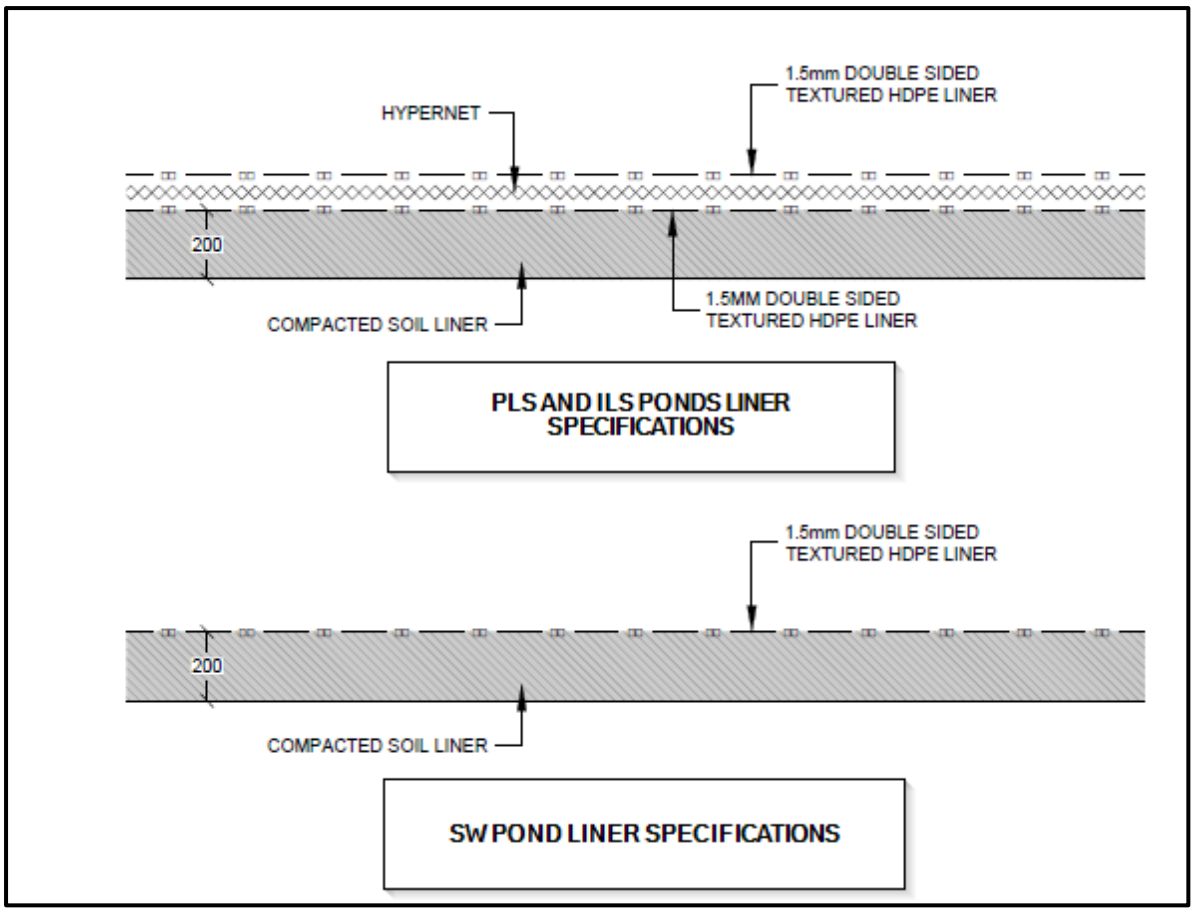

Figure 2: Proposed process ponds liner schematic

Groundwater monitoring

The applicant will construct four bores to monitor groundwater surrounding the heap leach facility. Each bore will contain both the shallow and deep bore. The monitoring bores will assist in detecting any changes to groundwater quality and depth at the premises. Construction of the groundwater bores will comply with Australian standards.

The approximate location of the groundwater monitoring network is shown in Figure 3.

The proposed monitoring program including parameters, frequencies and methodology are shown in Table 2.

Table 2: Proposed groundwater environmental monitoring program

Bore reference	Frequency	Methodology	Parameters
GBH-01 GBH-02 GBH-03 GBH-04	Monthly	Field sampling	– Standing Water Level – Salinity (TDS in mg /L) – PH – Temperature
	Six Monthly	Laboratory testing	**Major Ions:** – Bicarbonate (HCO_3) – Carbonate (CO_3) – Chloride (Cl) – Sulphate (SO_4^{2})

Bore reference	Frequency	Methodology	Parameters
			Metals (dissolved): – Aluminium (Al) – Antimony (Sb) – Arsenic (As) – Barium (Ba) – Beryllium (Be) – Boron (B) – Cadmium (Cd) – Calcium (Ca) – Chromium (Cr) – Cobalt (Co) – Copper (Cu) – Iron (Fe) – Lead (Pb) – Magnesium (Mg) – Manganese (Mn) – Mercury (Hg) – Molybdenum (Mo) – Nickel (Ni) – Tin (Sn) – Uranium (U) – Vanadium (V) – Zinc (Zn) **Nutrients & Others:** – Ammonium (NH_4) – Nitrate (NO_3) – Potassium (K) – Reactive Phosphorus (P) – Selenium (Se) – Strontium (Sr) – Total Cyanide (CN) – Total Kjeldahl Nitrogen (TKN) – Total Nitrogen (N) – Total Phosphorus (P) – Hydroxide (OH^-)

Gold recovery circuit

The PLS solution will be pumped to the carbon in column (CIC) recovery circuit located to the northwest of the process ponds. The CIC recovery circuit will be constructed within a hard stand and will be bunded. Each carbon in column train will comprise a series of six up flow carbon contactors that will allow the adsorption of gold onto carbon. The activated carbon will be forwarded by eductors, and the loaded carbon will be screened to removed impurities and oversized particles. The screened loaded carbon will be transported off-site to undergo acid wash elution, electrowinning and smelting. The barren solution will be stored within bunded tanks at the premises. A kiln at the premises will regenerate the carbon for any further use.

A flowchart of the crushing, screening, agglomeration and heap leaching processes is shown on Figure 4

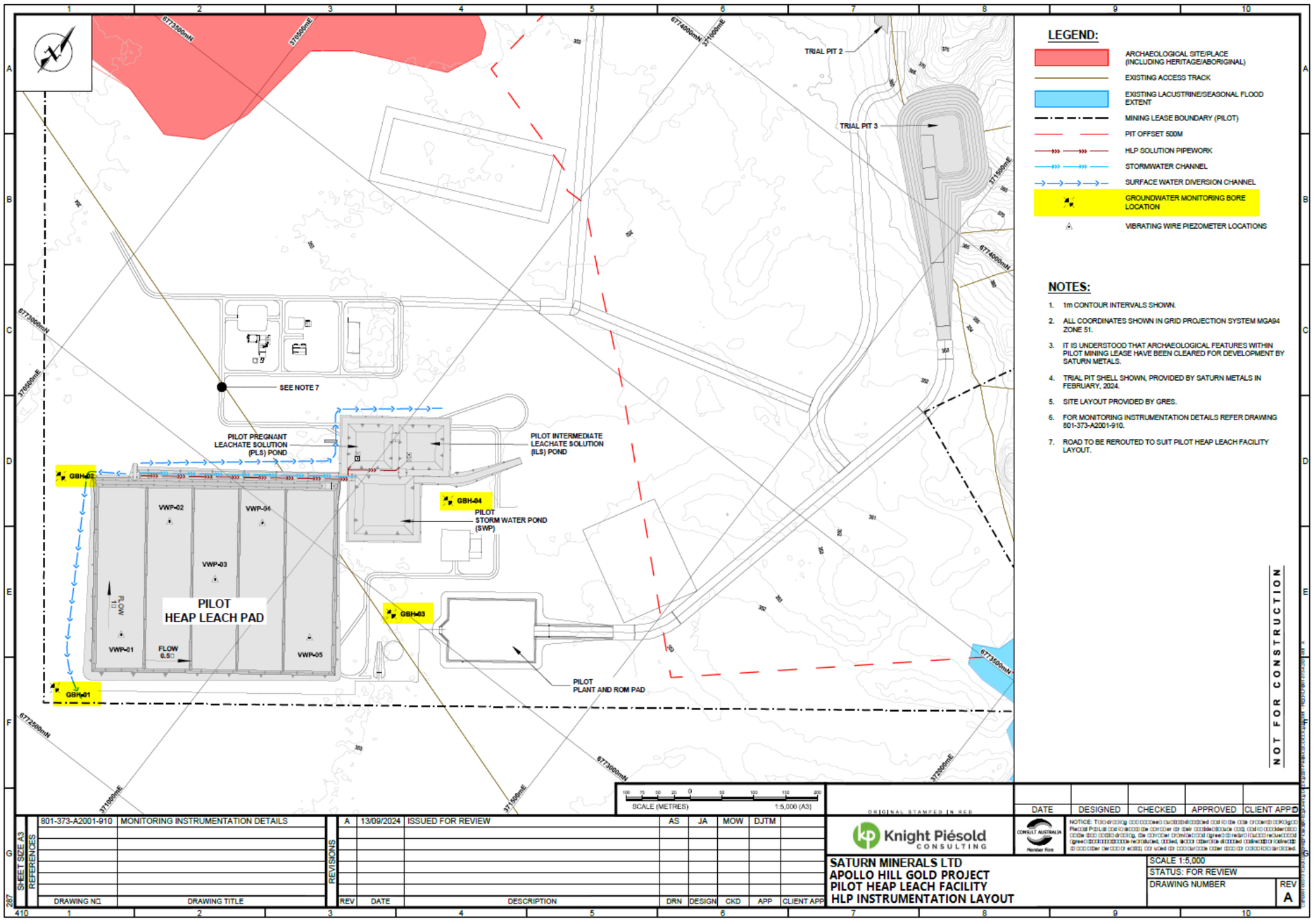

Figure 3: Approximate location of groundwater monitoring bores surrounding the heap leach facility (highlighted)

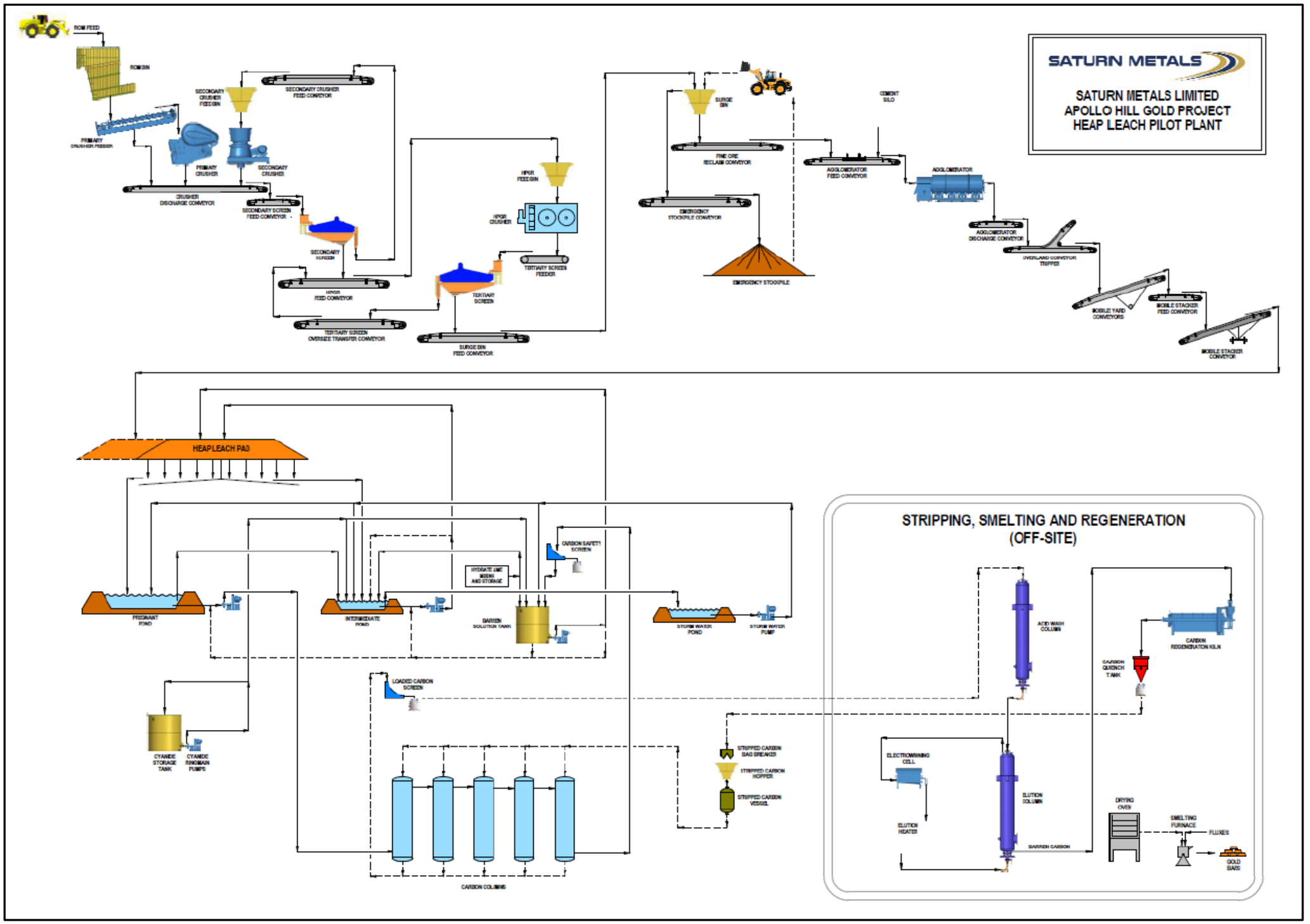

Figure 4: Flowchart showing the crushing, screening, agglomeration and heap leaching processes at the premises

2.2.3 Dewatering

Dewatering activities will be undertaken at the premises to enable dry mining during the excavation of the sample open pits (pit 1 and 2). The pits will intersect both weathered mafic and fresh rock to depths up to 33 metres below ground level (mbgl). Dewatering is anticipated to occur at a maximum rate of 2.9 litres per second (L/s).

A hydrogeological study conducted by Pentium Water (2023) concluded that the drawdown impact will be highly localised, extending to no more than 0.5 km from the pits. Importantly, no groundwater users are expected to be affected, as all lie beyond this radius.

Following cessation of dewatering, the open pits are expected to partially refill to a depth of approximately 10 metres. Beyond this point, evaporation will likely exceed groundwater inflow, resulting in the formation of a pit lake with salinity levels exceeding those of the hypersaline groundwater.

Contingent on the success of the pilot project, and the appropriate approvals, the applicant will expand mining operations and continue dewatering activities at adjacent pits; this will likely prevent the saline mine lake from forming. Should dewatering stop at the premises it is expected that the pit lakes will reach a maximum of 10 m depth, with evaporation continuing to exceed inflow beyond this depth.

Mine water from the open pit will be the main source of water at the process circuit and in dust suppression within the processing area.

2.2.4 Dust suppression

Mine water to be used in dust suppression will be stored in tanks. Any excess water not used in dust suppression will be pumped to the ILS and PLS ponds. Should a shortfall occur, mine water will be supplemented with bore water. Any dust suppression in open spaces including haul roads and other surfaces, will be done using hypersaline water blended with less saline sources including groundwater from the fractured rock aquifer within the premises. Salinity will be kept below 85,000 milligram per litre (mg / L) in accordance with the groundwater licence granted under section 5C of the RIWI Act. The applicant holds water licenses GWL212011(1) and GWL 212021(1) allowing the use of groundwater for dust suppression, mineral ore and other mining purposes.

The applicant expects that approximately 0.3 gigalitres per year of mine water from the dewatering of the open pit will be used in dust suppression.

3. Overview of the premises

3.1 Local environment

The premises is situated within the Murchison bioregion, a vast arid zone in inland Western Australia covering approximately 281,000 square kilometres. This bioregion is characterised by an arid to semi-arid climate, with highly variable rainfall and high evaporation rates (Carrick Consulting (WA), 2024). Data from the nearest weather stations to the premises indicates that average monthly rainfall peaks in February and March, with approximately 30 millimetres (mm) recorded during these months. The driest period typically occurs in September and October, with average rainfall around 10 mm. The average maximum temperature is approximately 27°C, with the hottest months being November to March. The coolest period is from June to August, when average minimum temperatures range between 6°C and 7°C. Wind speeds are generally around 10 km/h, typically easterly in the morning, changing to a westerly direction in the afternoon (Carrick Consulting (WA), 2024).

The landscape of the bioregion features red earths, loams, and stony plains, interspersed with rock outcrops and salt lakes, remnants of ancient river systems. Vegetation is closely tied

to the underlying soil and climatic conditions with the dominant vegetation type being mulga (*Acacia aneura*) low woodland, saltbush and bluebush communities near saline environments, and spinifex grasslands in the drier zones (Ecoscape (Australia), 2024).

The premises is characterised by gently undulating hills on the northwest side, with the highest point approximately 369 m AHD. To the south and southwest, a flat hardpan wash plains comprising of sandy clays and pebbles is where most of the runoff occurs. The soil profile mainly comprises of alluvium and colluvium over a layer of weathered Archean bedrock typical of the Yilgarn Craton (Pentium Water, 2023; Significant Environmental Services, 2023).

Groundwater at the premises is generally found in the lower saprolite layer with faults, shears and joints within the saprock acting as groundwater transmission channels. A groundwater survey conducted in 2022 comprising of twenty-two retrofitted monitoring bores found that groundwater levels ranged between 1.25 and 16.36 meters below ground level (mbgl), increasing with increased elevation (Pentium Water, 2023).

Groundwater was found to be hypersaline with a total dissolved solids (TDS) concentration varying between 44,000 and 120,000 mg / L and salinity rising towards the northeast. Baseline samples also indicated that concentrations of the main metals and metalloids were within the ranges expected in the Goldfields region except for alluminium (300 mg / L in one of the samples) and total iron, likely attributable to the presence of clay minerals (Pentium Water, 2024). While not ascertained at the time of the survey, evidence from historical records indicates that groundwater flow is in an east to south-east direction towards the drainage channel located east of the premises (Pentium Water, 2023).

Groundwater in the surrounding area is mainly used for mining purposes. A vegetation survey undertaken by the applicant showed that no groundwater dependent ecosystems exist near the activities regulated under the works approval. A groundwater dependent species (*Ecalyptus camaldulensis* subs. *arida*) intersects the corridor section to the south of the premises (Ecoscape (Australia), 2024), however, recent approvals granted under s 51E of the EP Act, show that this area may be subject to clearing.

Pre-European vegetation at the premises includes *Mulga Acacia aneura* and associated species, taller trees such as the *Casuarina species* and halophytic chenopod shrubland associated with salt lakes environments.

The premises lie immediately southwest of Lake Raeside, a paleo drainage system comprising of several playa lakes and river channels extending for approximately 350 km in a southeasterly direction. Rainfall drives the lake system recharge and severe rainfall events can occasionally lead to the isolated basins coalescing into a continuous water body. Historical satellite imagery shows that this last occurred in 1995 with flooding occurring up to a maximum elevation of 352.5 metres AHD within the premises (Carrick Consulting, 2024).

4. Risk assessment

The department assesses the risks of emissions from prescribed activities, 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 exposed to that emission through an identified actual or likely pathway, and a potential adverse effect to the receptor from exposure to that emission.

4.1 Source-pathways and receptors

4.1.1 Emissions and controls

Table 3 details the key emissions and associated actual or likely pathway during construction and time limited operation. Table 3 also details the control measures the applicant has proposed to assist in controlling these emissions, where necessary.

Table 3: Emissions from proposed activities and proposed applicant controls

Emission	Sources	Potential pathways	Proposed controls
Construction			
Noise	Construction of heap leaching facility, and CIC recovery circuit, mobilisation of crushing and screening plant, including movement of vehicles and machinery during construction	Air / windborne pathway	• Equipment will be maintained in accordance with the manufacturer's requirements • Any noise complaint will be recorded and investigated • Noise monitoring will be undertaken if required
Dust		Air / windborne pathway	• Water carts will be used for dust suppression purposes when dust is visible • Clearing and earthworks will not be undertaken during high winds • All vehicles will be subject to speed limits • Staff will be trained as appropriate
Sediment laden stormwater		Overland runoff	The applicant did not propose any specific controls for this stage of operations
Commissioning and time limited operations			
Heap leaching facility and associated infrastructure			
Dust	Transport and stacking of ore on the heap leaching pad during windy conditions	Air / windborne pathway	• Water carts will be used when dust is visible
Sediment laden / contaminated stormwater	Stacking and spraying ore during rainfall event	Overland runoff	• A berm approximately 1.5 meters high and 5 meters wide will be constructed around the perimeter of the heap leaching pad • A berm will surround each cell within the heap leaching pad • Each cell within heap leach pad will have a spillway leading to the lined stormwater channel and onto the stormwater pond. • Surface water diversion channels will be

Emission	Sources	Potential pathways	Proposed controls
			constructed north of the facility • A stormwater channel will direct sediment laden / contaminated stormwater to the stormwater pond • The overall system will be designed to contain a 1 in 100-year ARI storm event
Process solution (including cyanide)	(Over) spraying of stacked ore on the heap leaching pad	Air / windborne pathway and runoff	• Irrigation will be undertaken using drippers and wobblers to minimise incidental sprays • A berm approximately 1.5 meter high and 5 meters wide will be constructed around the perimeter of the heap leaching pad
Process solution (including cyanide)	Spill, leak or pipeline failure during operations	Overland runoff and infiltration	• A leak detection system and automatic cut-off will be installed on all pipelines at the premises • Pipelines will be situated within a lined channel with any spillage directed to the Stormwater Pond • Pipelines will be inspected once per shift during operations
Process solution (including cyanide)	Operations of heap leaching pad, liner failure	Seepage (infiltration)	• A 300 mm compacted low permeability layer graded smooth, will be topped with a 1.5 mm double sided HDPE liner • Quality control checks will be undertaken during the installation of the liner and the liner will be installed by experienced staff • Regular liner inspection and maintenance will be undertaken • The lining will be topped by a 300 mm liner protection layer of fined grained material with low gravel content • Primary and collector pipes will be installed across the heap leaching cells and will direct the solution as appropriate. Pipelines will be placed within a lined channel • Solution volume in launder boxes will be monitored, to determine whether any leaks are occurring through the liner • Groundwater monitoring bores will be installed to monitor any potential seepage • A groundwater monitoring program will include monthly monitoring of groundwater levels and quarterly monitoring of metals and metalloids concentrations. Triggers will be set to

Emission	Sources	Potential pathways	Proposed controls
			undertake further investigations where necessary
Chemicals solution and brackish water	Overtopping of the process ponds	Overland runoff and infiltration	• A minimum freeboard of 300 mm will be maintained in all ponds • Water level alarms will be installed in all ponds • Inspections of ponds will occur at least once per shift
Cyanide and other process solution exposure to the environment	Process ponds operations, irrigation of the ore stacked on the leaching pad and ponding	Direct contact	• Surface of the heap leach will be graded to avoid ponding • All open water storage facilities will be fenced • Inspections will occur once per shift during operations on all water storage facilities, open holes and trenches • Wildlife deterrents will be used if inspections show evidence of wildlife access • Egress matting will be used on open water storage facilities
Crushing, screening and agglomeration operations			
Dust	Crushing, screening, loading unloading and operations of the agglomerator and conveyor belt transporting the ore	Air / windborne pathway	• Visual inspections will be undertaken to assess dust levels • Dust suppression sprays will be fitted and operated during operations, particularly at transfer and discharge points • Water carts will be operated when dust is visible
Sediment laden stormwater		Overland runoff	• Any stormwater generated will be directed to the SW pond for re-use in the process circuit.
Dewatering			
Hypersaline mine water	Spill, leak or pipeline failure during operations	Overland runoff and infiltration	• Visual assessments will be undertaken to determine the integrity of the pipe • Visual assessments will be undertaken to determine the integrity of the tanks • The HDPE pipes will be fitted with a leak detection system
Brackish water	Use of the mine water for dust suppression purposes	Infiltration / direct contact	• Salinity will be kept below 85,000 mg / L through a blending process, that will include storm water pond, trunk and tributary bore fields

Emission	Sources	Potential pathways	Proposed controls
Hypersaline water	Overtopping	Overland runoff and infiltration	• Dewatering volumes recorded monitored and recorded • Mine water will be stored in the PLS and ILS ponds, each with a minimum freeboard or 0.3m and a spillway to the storm water pond.
General – Chemical and fuels			
Combustible liquids (diesel and LPG), quicklime, cyanide, caustic and hydrochloric acid, sodium metabisulfite, carbon.	Daily operations of the plants, spills from transfer, failure of tanks integrity during storage	Runoff / Infiltration (when in solution) and air / windborne pathway (in its solid form).	• Hydrocarbons and chemical spills will be reported internally and immediately cleaned up • Any spill over 250 L will be reported to DWER in the Annual Environmental Report • All chemical reagents will be stored in bunded tanks and silos • Handling will occur using specialized handling systems such as valve metering systems, dosing pumps etc. • Any bunded facilities will have a capacity of 110% of the largest vessels and 25% of the total volume of chemicals / reagents stored.

4.1.2 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 4 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 4: Sensitive human and environmental receptors and distance from prescribed activity

Environmental receptors	Distance from prescribed activity
Flora Pre-European vegetation mainly consisting of Mulga, other wattle, casuarina Atriplex spp, Maireana spp, *with Acacia aneura, A. papyrocarpa, Allocasuarina cristata.*	Next to the infrastructure, particularly to the south and west of the heap leaching pad and crushing and screening plant
Priority Flora under the *Environmental Protection and Biodiversity Conservation Act 1999* P1: *Tectricornia globulfifera*	Found during a 2023 vegetation survey (Ecoscape, 2024) undertaken at the premises. The Priority one flora is found in the southeast corner of the premises and approximately 1 km from the mining activities and approximately 300 m from where dust suppression will be

Environmental receptors	Distance from prescribed activity
	undertaken. Given the separation distance, it is unlikely that this priority flora will be directly affected by the activities. As an actual or likely source-pathway-receptor linkage does not exist, this priority flora has not been mentioned further in this assessment.
Other significant Flora: International Union for the conservation of nature (IUCN) listed species: *Santalum spicatum*	Directly adjacent to the leaching activities
Fauna International recognition (African-Eurasian Migratory Waterbirds (AEWA) and IUCN): *Actitis Hypoleucos* (common sandpiper) *Priority* under the Western Australia 'Priority Flora and Priority Fauna List': *Polytelis alexandrae* (princess parrot)	In the premises area
Groundwater Proclaimed Goldfields Groundwater area under the Rights in Water and Irrigation Act 1914 (RIWI Act). Regional groundwater is typically hypersaline (total dissolved solids >35,000 mg/L). Groundwater salinity at the premises ranges from 44,000 mg /L to 120,000 mg / L. Depth to groundwater measured in 2022 indicated a range from 1.2 to 16.3 mbgl increasing in higher relief areas. Water flow is likely to have an easter to south-eastern gradient with groundwater flowing into the drainage channels to the east of the premises (Talis Consultants, 2024) The applicant holds two groundwater abstraction licenses for mining, dust suppression and camp purposes (GWL212011(1) and GWL212012(1))	Underlying
Surface Water Several ephemeral drainage lines forming part of the Raeside-Ponton catchment. The area is part of the Salt Lakes District, characterized by numerous ephemeral salt lakes. The area is prone to inundation.	The closest is approximately 450 m north of the processing area.

4.2 Risk ratings

Risk rating for each emission source has been assessed in accordance with the *Guideline: Risk Assessments* (DWER 2020). As identified in section 4.1, the risk rating considers potential source-pathway and receptor linkage. Where linkages are incomplete, they have not been considered further in the risk assessment.

Where the applicant has proposed mitigation measures/controls (section 4.1) these have been considered when determining the final risk rating. Where the Delegated Officer considers these proposed controls critical to maintaining an acceptable level of risk, the same proposed controls 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, a justification will be provided in Table 5.

Works approval W3043/2025/1 that accompanies this decision report authorises construction and time-limited operations.

The conditions outlined in Table 5 and in the issued works approval, have been determined in accordance with *Guidance Statement: Setting Conditions* (DER 2015).

A licence will be required following the time-limited operational phase, to authorise emissions associated with the ongoing operation of the premises.

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 5: Risk assessment of potential emissions and discharges from the premises during construction, commissioning and operation

Risk events					Risk rating [1] C = consequence L = likelihood	Applicant controls sufficient?	Conditions[2] of works approval	Justification for regulatory controls
Sources / activities	**Potential emission**	**Potential pathways and impact**	**Receptors**	**Applicant controls**				
Construction								
Removal of topsoil, construction of heap leaching facility including ponds, and adsorption circuit, mobilisation of crushing and screening plant, including movement of vehicles and machinery during construction	Dust	**Pathway:** air/windborne pathway **Impact:** degradation of surrounding pre-European vegetation	Surrounding native vegetation	Refer to Section 3.1	C = Slight L = Unlikely **Low Risk**	Y	N/A	It is expected that some dust emissions will occur during construction activities, however, given the duration of the activities and the applicant's proposed controls it is considered that the risk to surrounding receptors will be low. No regulatory controls have been considered necessary on the works approval to control dust emissions during construction activities.
	Sediment laden stormwater	**Pathway:** overland runoff **Impact:** degradation of surface water quality and soil health	Ephemeral drainage line after rainfall events and soil	Refer to Section 3.1	C = Minor L = Unlikely **Medium Risk**	N	**Condition 4**	The risk of sediment laden stormwater resulting from the construction activities, including the removal of topsoil, was not specifically addressed on the application. While the premises is located in a semi-arid climate, characterised by low and irregular rainfall, rainfall is usually in the form of downpours and can result in flash flooding. Two ephemeral surface water lines at the premises are immediately west and the east of the operational area, therefore any runoff could potentially have onsite impacts. Given the above, the risk event has been deemed as *medium* from a *minor* consequence and a *possible* likelihood. To decrease the likelihood of the risk event occurring, a general condition has been added to the works approval. The condition states that the applicant must take all practicable measures to prevent stormwater

Risk events					Risk rating [1] C = consequence L = likelihood	Applicant controls sufficient?	Conditions[2] of works approval	Justification for regulatory controls
Sources / activities	**Potential emission**	**Potential pathways and impact**	**Receptors**	**Applicant controls**				
								run-off from becoming contaminated as a result of construction activities at the premises. The application of this regulatory control has lowered the likelihood of the risk event occurring to *unlikely*.
Commissioning and time limited operation								
Heap leaching facility and associated infrastructure								
Process solution pipelines connecting the heap leach pad and the ponds	Cyanide solution from spills / pipeline failures / pipeline leakage	**Pathway**: overland runoff and infiltration **Impact**: deterioration of surface water quality and soil health with consequent impact to surrounding vegetation and fauna	Soil, surface water, flora and fauna	Refer to Section 3.1	C = Minor L = Unlikely **Medium Risk**	Y	Condition 2 Condition 13 Condition 14	Applicant's proposed controls, including the pipeline specifications, leak detection system and appropriate bunding to contain spills were deemed adequate to mitigate risks associated with the operations of the pipeline. The risk rating has been deemed *medium* from a *minor* consequence and an *unlikely* likelihood ratings. Controls have been conditioned within the works approval in accordance with DWER *Guideline: Risk Assessments* (DWER 2020).
Stacking of the heap leach pad	Dust from stacking / depositing the ore on the pad during windy conditions.	**Pathway:** Air/windborne pathway ***Impact:*** degradation of surrounding pre-European vegetation, and overall ecosystem disturbance	Native Vegetation	Refer to Section 3.1	C = Slight L = Unlikely **Low Risk**	Y	Condition 13	Some dust generation is anticipated during time limited operations of the heap leach pad. While the applicant has not outlined dust control measures specific to the stacking process, it is expected that the existing visual monitoring approach, and the deployment of water carts when dust is noted will be applied across all dust-generating activities at the premises, not solely at the crushing and screening plant and the stockpiles. Based on this assumption, the Delegated Officer has assessed the risk of dust emissions impacting surrounding native vegetation as *low*, with a *slight* consequence and

Risk events					Risk rating [1] C = consequence L = likelihood	Applicant controls sufficient?	Conditions[2] of works approval	Justification for regulatory controls
Sources / activities	**Potential emission**	**Potential pathways and impact**	**Receptors**	**Applicant controls**				
								an *unlikely* likelihood. Applicant's controls (as outlined for the crushing and screening plant) have been conditioned within the works approval in accordance with DWER *Guideline: Risk Assessments* (DWER 2020).
Operations of heap leach pad including spraying and drainage / solution collection	Sediment laden / contaminated stormwater	**Pathway**: overland runoff and infiltration **Impact**: deterioration of surface water quality and soil health with consequent impact to surrounding vegetation and fauna	Soil and vegetation	Refer to Section 3.1	C = Minor L = Unlikely **Medium Risk**	Y	Condition 1 Condition 2 Condition 13	The premises is located within an arid climate with rainfall mostly occurring in the form of downpours particularly during January and February. Unlike construction activities, the applicant has proposed several mitigation measures during operations of the heap leach pad, including the construction of collection channels directing contaminated stormwater to the process ponds and diversion channels to ensure non contaminated stormwater remains separate. The Delegated Officer therefore has considered the likelihood of contaminated stormwater affecting soil and vegetation during operations of the heap leach to be *unlikely*, with a *minor* consequence, making the risk event rating low. Applicant's controls have been conditioned within the works approval in accordance with DWER *Guideline: Risk Assessments* (DWER 2020).
	Exposure to cyanide solution	**Pathway:** direct contact **Impact**: death **of** protected birds	Protected bird species	Refer to Section 3.1	C = Minor L = Unlikely **Medium Risk**	Y	Condition 13 Condition 14	Applicant's proposed controls have been deemed sufficient in mitigating the risk associated with the exposure of protected birds to the toxicity of the cyanide solution. Additionally, the Delegated Officer notes that the high salinity concentration of both PLS and ILS ponds (TDS up to 240,000 mg / L), where the concentration of cyanide will be highest, is likely to render the water quite

Risk events					Risk rating [1] C = consequence L = likelihood	Applicant controls sufficient?	Conditions[2] of works approval	Justification for regulatory controls
Sources / activities	**Potential emission**	**Potential pathways and impact**	**Receptors**	**Applicant controls**				
								unpalatable to birds. When considering the proposed measures, and the palatability of the water, the Delegated Officer has deemed the risk to be *medium*, from a *minor* consequence and an *unlikely* likelihood. Applicant's controls have been conditioned within the works approval in accordance with DWER *Guideline: Risk Assessments* (DWER 2020
	Cyanide solution from over spraying	**Pathway:** Air / windborne pathway, and overland runoff **Impact:** degradation of soil, pre-European vegetation and surface water.	Native Vegetation, soil surface water	Refer to Section 3.1	C = Moderate L = Unlikely **Medium Risk**	Y	Condition 1 Condition 13	The proposed controls including the use of drippers and the 1.5 m berm surrounding the heap leach pad and each cell to minimise airborne transport of contaminants are considered acceptable to mitigate the risk of over spraying and reducing the potential impact on surrounding receptors. Taking into account the proposed controls, the likelihood rating has been deemed *unlikely*. The consequence has been considered *moderate* due to possible mid-level onsite impacts (vegetation death) and low-level offsite impacts (cyanide could enter nearby surface water and be transported downstream at detectable concentrations). The risk rating has therefore been deemed to be *medium*. Applicant's controls have been conditioned within the works approval in accordance with DWER *Guideline: Risk Assessments* (DWER 2020).
	Leachates (including cyanide and other chemical solutions) from liner failure, cracking or	**Pathway:** Seepage **Impact:** Soil and groundwater contamination	Groundwater, native vegetation and soil	Refer to Section 3.1	C = Moderate L = Unlikely **Medium Risk**	N	**Condition 1** Condition 3 Condition 13 Condition 14	Groundwater use surrounding the premises is mainly linked to mining activities. (Note 3) Contamination of groundwater and soil with cyanide and other chemical compounds through seepage and infiltration could result in the poisoning of surrounding native

Risk events					Risk rating [1] C = consequence L = likelihood	Applicant controls sufficient?	Conditions[2] of works approval	Justification for regulatory controls
Sources / activities	Potential emission	Potential pathways and impact	Receptors	Applicant controls				
	poor installation						**Condition 19**	vegetation (through root absorption). Investigations of groundwater at the premises showed that groundwater depth is between 1.2 to 16.3 mbgl and analytes did not appear to be elevated beyond the range common to the Goldfields, aside from Aluminium and Iron concentrations, likely associated with the presence of clay minerals (Pentium Water, 2023). The applicant proposed constructing four groundwater bores surrounding the heap leaching infrastructure with an ongoing monitoring program undertaken to detect any changes from an established baseline. Monitoring frequency of standing water level, pH, and TDS is proposed to be monthly, with all other chemical parameters monitored on a six-monthly basis. The likelihood of seepage and infiltration, and the potential consequent contamination of groundwater and soil will be significantly influenced by the construction and management of the heap leaching pad and process ponds, particularly the appropriate fitting, testing and maintenance of the lining structure. The applicant proposed an apparent acceptable lining structure and stated that the lining will be installed by experienced staff and appropriate quality assurance and quality control and testing will be conducted, but no specific methodology was proposed. The Delegated Officer finds that, given the key role of the lining in limiting seepage and the potential contamination of groundwater, unambiguous lining specifications, a lining installation procedure and a lining testing methodology must be undertaken. These requirements have been added to the works

Risk events					Risk rating [1] C = consequence L = likelihood	Applicant controls sufficient?	Conditions[2] of works approval	Justification for regulatory controls
Sources / activities	**Potential emission**	**Potential pathways and impact**	**Receptors**	**Applicant controls**				
								approval as part of condition 1, which outlines the construction requirements of the critical containment infrastructure. As for groundwater monitoring frequency, the Delegated Officer has increased the monitoring frequency of chemical parameters to quarterly (from six monthly). This will ensure that at least two sample events can occur during time limited operations, thus providing a better understanding of the present groundwater conditions at the premises. The combination of the applicant's proposed mitigation measures and the additional regulatory controls will ensure that the risk rating remains within an acceptable range. Taking into consideration the additional regulatory requirements, the risk event rating was deemed *medium* from a *moderate* consequence and *unlikely* likelihood. While the consequence does not change with the additional regulatory controls, they do contribute to lower the likelihood of the risk event occurring from a *possible* likelihood. Applicant's controls have been conditioned within the works approval in accordance with DWER *Guideline: Risk Assessments* (DWER 2020).
	Solution (containing high levels of metals including cyanide and other compounds) from	**Pathway:** overland runoff **Impact:** degradation of soil and surrounding pre-European vegetation, degradation of	Native vegetation, soil and surface water	Refer to Section 3.1	C = Moderate L = Unlikely **Medium Risk**	Y	Condition 1 Condition 13 Condition 14	The proposed mitigation measures including a freeboard across all process ponds, water level alarms and regular inspections to determine the ongoing capacity of the ponds, will decrease the likelihood of degradation of native vegetation and surface water from overtopping of the ponds. The Delegated Officer finds that the

Risk events					Risk rating [1] C = consequence L = likelihood	Applicant controls sufficient?	Conditions[2] of works approval	Justification for regulatory controls
Sources / activities	**Potential emission**	**Potential pathways and impact**	**Receptors**	**Applicant controls**				
	overtopping / embankment failure	surrounding surface water quality						proposed mitigation measures are acceptable to maintain an acceptable risk. The risk rating has been deemed medium from a moderate consequence and an unlikely likelihood. Applicant's controls have been conditioned within the works approval in accordance with DWER *Guideline: Risk Assessments* (DWER 2020).
Operations of CIC facility and any associated chemical solution	Spills from transferring reagents from tanks and transferring cyanide / gold solutions for transport to outside facility	**Pathway:** overland runoff and infiltration **Impact:** deterio ration of surface water quality and soil health with consequent impact to surrounding vegetation and fauna	Soil, surface water, flora and fauna	Refer to Section 3.1	C = Minor L = Unlikely **Medium Risk**	Y	Condition 2	All reagents will be stored at the premises in bunded tanks and handling will occur using specialised handling systems. Additionally, the storage facility will be bunded and large enough to contain 110% of the largest vessel and 25% of the total volume. Taking into account the proposed controls, the likelihood rating has been deemed to be *unlikely*, while the consequence has been deemed to be *minor* leading to an overall *Medium* risk event rating. The Delegated Officer also notes that Dangerous Goods handling and storage is regulated under the *Dangerous Goods Safety Act 2004*.
Crushing, screening and agglomeration								
Crushing, screening and agglomeration operations, loading, unloading and ore stockpiling	Dust	**Pathway:** Air/windborne pathway **Impact:** degradation of surrounding pre-European	Native vegetation	Refer to Section 3.1	C = Slight L = Unlikely **Low Risk**	Y	Condition 2 Condition 13 Condition 14	Some dust generation is anticipated during the time-limited operations of the crushing and screening and agglomeration plant. The Delegated Officer finds that the proposed measures, including visual monitoring of dust and deployment of water carts when dust is noted, will maintain an acceptable level of risk. The risk of dust emissions impacting surrounding native vegetation has been deemed *low*, from a *slight* consequence and

Risk events					Risk rating [1] C = consequence L = likelihood	Applicant controls sufficient?	Conditions[2] of works approval	Justification for regulatory controls
Sources / activities	**Potential emission**	**Potential pathways and impact**	**Receptors**	**Applicant controls**				
								an *unlikely* likelihood. Applicant's controls have been conditioned within the works approval in accordance with DWER *Guideline: Risk Assessments* (DWER 2020).
	Sediment-laden / contaminated stormwater	**Pathway:** overland runoff **Impact:** degradation of surface water quality and soil health	Surface water and soil	Refer to Section 3.1	C = Minor L = Unlikely **Medium Risk**		Condition 2 Condition 13	The premises is located within an arid climate with rainfall mostly occurring in the form of downpours particularly during January and February. To mitigate the risk of the sediment laden / contaminated stormwater degrading surface water quality and soil health, the applicant has proposed several mitigation measures, including the construction of collection channels directing all stormwater to the process ponds. Furthermore, diversion channels will be constructed to separate contaminated from non-contaminated stormwater. The Delegated Officer has deemed the likelihood of contaminated stormwater affecting surface water and soil during operations of the crushing and screening (and agglomeration) plant to be rare, and the consequence minor, making the risk rating low.
Dewatering								
Transport and deposition of mine water	Hypersaline water from spills	**Pathway:** overland runoff **Impact:** degradation of surface water and soil	Surface water and soil	Refer to Section 3.1	C = Minor L = Unlikely **Medium Risk**	Y	Condition 2 Condition 13 Condition 14	Applicant's proposed controls, including the pipeline specifications and the leak detection system were deemed adequate to mitigate risks associated with leaks and spills. The risk rating has been deemed *medium* from a *minor* consequence and an *unlikely* likelihood ratings. Controls have been conditioned within the

Risk events					Risk rating [1] C = consequence L = likelihood	Applicant controls sufficient?	Conditions[2] of works approval	Justification for regulatory controls
Sources / activities	**Potential emission**	**Potential pathways and impact**	**Receptors**	**Applicant controls**				
								works approval in accordance with DWER *Guideline: Risk Assessments* (DWER 2020).
Dust suppression activities	Use of saline water for dust suppression	**Pathway:** overland runoff **Impact:** degradation of surface water and soil	Soil, native vegetation, ephemeral surface water	Refer to Section 3.1	C = Minor L = Unlikely **Medium Risk**	N	**Condition 15**	The applicant states that dust suppression activities will be undertaken at the processing area but may also be necessary along access roads. Where dust suppression is necessary along access roads, concentration of salinity from the dewatering of the open pit will be lowered by combining this water with other less saline groundwater sources (i.e., fractured rock). Discharged water salinity will be maintained below 85,000 mg /L TDS. A specific application methodology has not been proposed. The application of hypersaline water may have an adverse effect on any surrounding native vegetation through roots absorption (accumulated salinity in the soil) and any excess spraying that reaches the leaves. Depending on the volume discharged, the surrounding ephemeral surface drainage lines could also be affected. The Delegated Officer finds that a general condition to preserve the condition of the vegetation and the surrounding ephemeral drainage lines is necessary to lower the risk of any adverse impact. Condition 15, requiring the applicant to minimise drift during the application of dewater for dust suppression purposes has been added to the works approval. The application of the additional regulatory control lowers the likelihood of the risk event from possible to *unlikely*. As the consequence is considered to be *minor*, with only onsite impacts detectable, the risk rating has been deemed *medium*.

Risk events					Risk rating [1] C = consequence L = likelihood	Applicant controls sufficient?	Conditions[2] of works approval	Justification for regulatory controls
Sources / activities	**Potential emission**	**Potential pathways and impact**	**Receptors**	**Applicant controls**				
Chemicals and fuels								
Storage of chemicals and hydrocarbons onsite, refueling operations	Diesel or chemical compounds	**Pathway:** overland runoff and infiltration **Impact: contamination and** degradation of surface water and soil	Surface water and soil	Refer to Section 3.1	C = Minor L = Unlikely **Medium Risk**	Y	N/A	No regulatory controls are required as the he *Environmental Protection (Unauthorised Discharge) Regulations 2004* apply. Hydrocarbon storage is regulated under the *Dangerous Goods Safety Act 2004.*

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 underlined text** depicts additional regulatory controls imposed by department.

Note 3: The risks to subterranean fauna are beyond the scope of the decision report and are assessed under the RIWI Act in conjunction with the risk of drawdown.

5. Consultation

Table 6 provides a summary of the consultation undertaken by the department.

Table 6: Consultation

Consultation method	Comments received	Department response
The application was advertised on the department's website on 11 April 2025	No comments were received	N/A
Local Government Authority advised of proposal on 11 April 2025	No comments were received	N/A
The Shire of Menzies was also advised of the proposal given the proximity of the premises to the Local Government boundary and the future expansion project.	No comments were received	N/A
DEMIRS (now DMPE) was advised of proposal on 10 April 2025.	On 5 June 2025, DEMIRS confirmed that a mining proposal application (reg ID: 500273) had been received for the pilot project subject of this works approval, however the mining proposal had not yet been granted, as the department was waiting on additional information. Additional information included: • How the proponent will address the risk associated with the potential acid forming mafic schist • Further geotechnical information associated with the waste rock landform that did not currently appear to satisfy geotechnical requirements • The reason choosing to use *Guidelines for Mine Waste Dump and Stockpile Design*, rather than the departmental guidelines for tailings storage facilities noting that the heap leach facility will become a tailings storage facility at the end of the operational life.	Noted.

Consultation method	Comments received	Department response
The Wangkatja Tjungula Aboriginal Corporation RNTBC was advised of the proposal on 11 April 2025	No comments were received	N/A
Department of Planning Lands and Heritage (DPLH) was advised of the proposal on 11 April 2025	The DPLH responded on 19 May 2025 and provided the following comments: • The premises subject area of this application is within the boundary of Aboriginal sites: Lake Reyside and AH Scatter 02 (IDs: 2708 and 39771 respectively) • Based on the above the applicant will require an approval under the *Aboriginal Heritage Act 1972* (AH Act) • A previous section 18 Consent was provided to the applicant which had a partial intersection with the premises boundaries • The granting of the works approval does not impact the Aboriginal heritage of the area, and granting of the works approval is unrelated from an approval under the AH Act. • The applicant must contact the Aboriginal Heritage Conservation Team prior to commencement of works	Noted. The applicant is encouraged to make sure all relevant approvals under the AH Act are in place prior to construction or operation of the premises.
The applicant was provided with the draft works approval and draft decision report on 1 September 2025.	The applicant responded on 26 September 2025. Individual comments are shown Appendix 1 of this report.	Please refer to Appendix 1 for departmental response.
A revised draft works approval and decision report was provided to the applicant on 16 October 2025.	The applicant responded on 3 November 2025. Individual comments are shown Appendix 1 of this report.	Please refer to Appendix 1 for departmental response.

6. 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. Carrick consulting (WA) Pty Ltd. *Apollo Hill Pilot Project Baseline Hydro-meteorology & Surface Water Management*. Perth, Western Australia.
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.
5. Ecoscape (Australia) Pty Ltd. *Apollo Hill Gold Project Flora and Fauna Assessments – Pilot Plant and Bulk Sample*. Fremantle, Western Australia.
6. International Cyanide Management Institute (ICMI). *The International Cyanide Management Code for the Manufacture, Transport, and Use of Cyanide in the Production of Gold.* Washington, DC., USA.
7. Talis Consultants 2024. Native vegetation clearing permit (purpose): Supporting Documentation, Apollo Hill Project. Perth, Western Australia.
8. Pentium Water, 2023. *Apollo Hill Project - Pilot Plant and Bulk Sample Pit Development - Groundwater Studies*. West Perth, Western Australia.
9. Significant Environmental Services, 2023. *Memo Report.* Duncraig, Western Australia.

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

Condition number and / or other reference	Summary of applicant's comment	Background / Department's response
Condition 1 – Table 1 – Item 1: Heap Leaching facility	Saturn Metals confirms that *the lining material specifications* as stated on the draft works approval will be met.	Lining material specifications were outlined by the department on the works approval in absence of any proposed specifications. Response not required.
Condition 2 – Table 2 – Item 3: Pipelines Condition 13 - Table 4 - Item 6: Pipelines	Two open pits will require dewatering during the pilot project. A map outlining the location of the open pits and the pipeline route from the open pits to the PLS and ILS ponds has been provided.	The extent of the dewatering operations and the location of the pipelines were confirmed during the 21-day comment period. Following the applicant's comments the department reassessed the risks associated with the dewatering activities for an additional open pit. Table 5 of this decision report reflects the updated risk assessment and incorporates the dewatering of open pits 1 and 3. No additional regulatory requirements were deemed necessary in the works approval as a result of the reassessment. The Delegated Officer notes that the map provided during the comment period included a pipeline extending east, beyond the immediate location of the open pits. As such, clarification was sought from the applicant regarding this pipeline. The applicant confirmed that the pipeline connects to a proposed production bore. In accordance with the EP Regulations, the works approval regulates *premises on which water is extracted and discharged into the environment to allow mining of ore;* therefore, this additional stretch of pipeline does not form part of the scope of the application. The additional stretch of pipeline has been temporarily pixelated on Figure 7 of the works approval; however, an amended version of this figure was requested.

Condition number and / or other reference	Summary of applicant's comment	Background / Department's response
	The gold recovery circuit is located immediately adjacent to the PLS and ILS ponds. A figure showing the infrastructure has been provided.	The figure has been included in the works approval (Schedule 1, Figure 6) and referenced appropriately.
Condition 1 – Table 1 – Item 1: Heap leaching facility – (i)	Amend: *Heap leach pad to comprise of 5 discrete cells approximately 283 m long and 16 m wide* to: *Heap leach pad to comprise of two lifts. Lift 1 comprises of 5 discrete cells approximately 283 m long and 69 m wide per cell. Lift 2 consists of a single cell.*	Condition 1 outlines regulatory requirements during the construction and installation phase; therefore, the description of the lifts was not included in this section. The 'lifts' refer to the heaped ore placed on the pad which occurs during the operational phase. Individual cells width typing error was amended. Additionally, for added clarity the word *each* was added to the condition to outline that these measurements (283 m long and 69 m wide) apply to the individual cells. The Delegated Officer notes that the overall size of the heap leaching pad had been assessed correctly on the decision report, therefore, a review of the risk associated with its construction and operation, following the above discrepancy, was deemed unnecessary. Condition 13, Table 4, Item 1 describes the heap leaching facility operations. Operational requirement (d) was reworded, and operational requirement (e) was added as shown below: *(d) Ore stacking to occur in two distinct lifts each with a nominal height of approximately 8 m* *(e) First lift to comprise of stacked ore in 5 discrete cells and second lift of stacked ore in one cell*
Condition 1 – Table 1 – Item 1: Heap leaching facility – (j)	Amend*:* *Each cell to be surrounded by individual berms constructed in accordance with Figure 7 of Schedule 2* *t*o: *The facility is to be surrounded by individual berms constructed in accordance with Figure 7 of Schedule 2.* The berms included in the design of Figure 7 show berms to be constructed around the base of the lift.	The condition was corrected to reflect the figure. Additionally, Condition 1 – Table 1 – Item 1: Heap leaching facility – (i) was amended from: *Heap leach pad to comprise of 5 discrete cells each approximately 283 m long and 69 m wide* to:

Condition number and / or other reference	Summary of applicant's comment	Background / Department's response
		Heap leach pad to comprise of 5 discrete cells each approximately 283 m long and 69 m wide, separated by divider berms The rewording of item (i) maintains the intent of condition (j) prior to the above correction.
Condition 1 – Table 1 – Item 1: Heap leaching facility, PLS, ILS and SW pond Condition 13 Condition 14 Condition 16	Correct table numbers and other referencing throughout the works approval. Some formatting issues with automatic / sequential numbering require addressing. Some Figures have been incorrectly referenced.	Corrected.
Condition 2	Include Table number.	Table number included.
Condition 2 - Table 2 – Item 2: Gold recovery circuit / chemical storage	Amend infrastructure location description from: *Plant Office & Lab* to *Plant laydown*	The description was amended. A clearer figure of the gold recovery circuit and chemical storage was provided by the applicant, and added to the works approval (Schedule 1, Figure 6). The additional figure was referenced on this table.
Condition 2 - Table 2 Condition 13 - Table 4 Condition 15	Further to the confirmation that two pits will require dewatering to allow the extraction of ore, amend conditions to include O*pen Pit 2*	The figures provided as part of the works approval application referred to two open pits labelled as PP Pit 1 and 3. Naming of the open pits on the works approval was kept as 1 and 3, however, clarifications on the naming were requested when the revised versions of the draft instrument and decision report were forwarded to the applicant. Figures naming should be consistent throughout the works approval and should be replaced if necessary.
Comments on the revised version of the works approval		
Condition 2 - Table 2 Condition 13 - Table 4	Rename *Open Pit 1* and *Open Pit 3* to *Open Pit 1* and *Open Pit 2*. Replacement figures have been provided.	The conditions have been amended and figures replaced.

Condition number and / or other reference	Summary of applicant's comment	Background / Department's response
Condition 15		
Figure 7	Replace the dewatering pipeline figure with the one provided.	The figure has been replaced. The Delegated Officer notes that a replacement of Figure 3 was not provided. Figure three showed the open pits (labelled as *Trial pit 1* and *Trial pit 2*). To avoid confusion and inconsistencies with previous figures the numbering of the open pits has been removed, noting that this figure is meant to highlight the location of the bores and the stormwater infrastructure only.
Table 7 - Definitions	Update reference	Updated.
Condition 2, Table 2 and Condition 13, Table 4	Reference Figure 2, instead of Figure 3	Reference amended for the stormwater infrastructure. Other references to Figure 3 are relevant.