Government of Western Australia
Department of Water and Environmental Regulation

Amendment Report

Application for Licence Amendment

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

Licence Number	L9259/2020/1
Licence Holder	Golden Spur Resources Limited
ACN	161 329 933
File Number	INS-0002137
Premises	Bellevue Gold Project Mining tenements M36/24, M36/25 and M36/299 As defined by the coordinates in Schedule 1 and premises maps attached to the revised licence
Date of Report	16/12/2025
Decision	Revised licence granted

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1. Decision summary

Licence L9259/2020/1 is held by Golden Spur Resources Pty Ltd (licence holder) for the Bellevue Gold Project (the premises), located on mining tenements M36/24, M36/25 and M36/299, in the Shire of Leonora.

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 operation of the premises. As a result of this assessment, revised licence L9259/2020/1 has been granted.

The revised licence issued as a result of this amendment consolidates and 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

On 14 October 2025, the licence holder submitted an application to the department to amend licence L9259/2020/1 under section 59 and 59B of the *Environmental Protection Act 1986* (EP Act). The following amendments are being sought:

- Authorise operation of the Integrated Waste Landform Tailings Storage Facility (IWLTSF) stage 3, as constructed under works approval W6724/2022/1;
- Construction and operation of a dewatering pipeline from the Historical TSF into the Processing Plant Dams; and
- Construction and operation of a pipeline from the Reverse Osmosis (RO) plant in the village to the Henderson pit.

This amendment is limited only to changes to Category 5 and 6 activities from the existing licence. No changes to the aspects of the existing licence relating to Category 52, 54, 64 and 70 have been requested by the licence holder. Table 1 below outlines the proposed changes to the existing licence.

Table 1: Proposed design or throughput capacity changes

Category	Current design/ throughput capacity	Proposed design/ throughput capacity	Description of proposed amendment
5	1,350,000	No change	Operation of the Integrated waste landform tailings storage facility (IWLTSF); Operation of a pipeline from the Historical TSF to the Processing Plant Dams for disposal of water from surface of TSF.
6	1,200,000	No change	Operation of a pipeline from the RO plant to dispose of wastewater into Henderson Pit.

2.2.1 Dewatering decant Pipeline to process water ponds

The licence holder proposes to install a pipeline from the Historical TSF to the process water dams. This pipeline will be installed in the same earthen V-drains currently used by the Tribune underground dewatering infrastructure and the decant return water lines. These V-drains have the capacity to contain any spillage or leaks from the pipelines. Water will be pumped intermittently from the Historical TSF, at an average rate of 59,000 kL per month, with the primary objective of removing all remaining standing surface water prior to commencement of rehabilitation works.

The process water pond consists of two cells with a combined capacity of 9,680 m^3. They are lined with a HDPE liner. The licence holder indicates that there is sufficient volume for use by the processing plant. A freeboard of 300 mm is maintained from the top of the process water pond (western dam) and the raw water dam (eastern dam) flows into the western dam via an overflow. Freeboard is monitored via a micro switch level sensor, which is tied into the High alarm within the processing plant control room. The water is not used for any other uses other than the processing plant.

2.2.2 Discharge Pipeline to Henderson Pit

Reject water from the reverse osmosis plant is proposed to be directed to the Henderson Pit for use in underground operations. The current volume of approximately 2,000 m^3 per month is currently sent to the wastewater treatment plant and disposed of at the sprayfield. The Henderson pit total capacity is 314,000 KL, with 8,000 KL storage in the underground workings. The additional 2 KL per month is assumed by the licence holder to not impact the storage capacity of the pit. The quality of the reject water is shown in Table 1 below.

During the last amendment to the licence, it was noted by the department that the Henderson Pit has limited available storage capacity and is close to reaching the specified freeboard on the licence (1.5m below crest level). Based on the most recent pit standing water level monitoring event in October 2024, the Henderson Pit lake level is at 465.9 mAHD (i.e., 2.62 m allowance). Condition 5 was updated during the last amendment to require twice daily freeboard inspections of the Henderson Pit due to this limited capacity.

The licence holder has conducted preliminary investigations into the underground flows at the Henderson Pit which were higher than predicted (DWER, 2025). The inflow has been assumed by the licence holder to migrate through old workings and exploration boreholes connected to the Henderson Pit (DWER, 2025). Condition 10 authorises the licence holder to discharge mine dewater from Henderson Pit to Westralia pit only when require to mitigate the risk of overtopping at Henderson Pit.

Table 1: RO water analytes

Analyte (mg/L)	**pH**	**TDS**	**$CaCO_3$**	**SO_4**	**Cl**	**Ca**	**Mg**	**Na**	**K**
RO Reject	7.88	2320	279	210	762	170	99	423	12
Analyte (mg/L)	**Sb**	**As**	**Cd**	**Cr**	**Cu**	**Co**	**Ni**	**Pb**	**Zn**
RO Reject	<0.001	0.008	<0.0001	<0.0001	<0.001	<0.001	<0.001	<0.001	0.019
Analyte (mg/L)	**Mn**	**Mo**	**Se**	**Tl**	**Pb**	**Total N as N**	**Total P as P**	**Total Organic Carbon**	**BOD**

RO Reject	<0.001	0.001	<0.01	<0.001	<0.05	46	0.4	10	<2
Analyte (mg/L)	**E coli**	**Total Residual Cl**							
RO Reject	<1	<0.01							

2.2.3 Integrated Waste Landform Tailings Storage Facility (IWLTSF) (Stage 3)

The approved tailings storage design under works approval W6724/2022/1 originally consisted of three stages: IPTSF (Stage 1), a Water Storage Dam (WSD) planned for conversion into a TSF (Stage 2) RL 482.0m, and IWLTSF (Stage 3) RL 484.5m. These facilities were designed to be developed and operated in stages. The WSD conversion to TSF (Stage 2) required a 4.0m excavation within the TSF footprint; however, this plan was abandoned due to shallow refusals encountered across the proposed excavation area. As a result, the approved IWLTSF (Stage 3) design was restructured. The perimeter embankment was subsequently divided into two sections starting approximately midway along the eastern embankment, with the northern part designated as IWLTSF (Stage 2) RL 484.5 m and the southern section assigned to IWLTSF (Stage 3) RL 484.5 m.

These tailings facilities were planned to operate sequentially and over time, the three facilities were to merge into a single IWLTSF (stage 3), with IPTSF (Stage 1) completely encapsulated with tailings by the conclusion of IWLTSF (Stage 3) operations.

IPTSF (Stage 1) was commissioned in late October 2023 and reached its planned deposition elevation in late October 2024. The construction of IWLTSF (Stage 2) was completed in August 2024.

The construction of IWLTSF (Stage 3) commenced in March 2024, and on 15th May 2025, the department approved time limited operations of Stage 3 from a critical containment construction report (CCIR) submitted on 12 March 2025.

The department noted during the assessment of the Stage 3 CCIR that other amendments to the design of stage 3 occurred beyond the staged restructuring (stage 2 and stage 3). Key changes included:

- Replacing unavailable low-permeability Zone 1 material with an HDPE liner, revising upstream slope to 1V:3H for liner placement, widening Zone 3A to 10 m for stability, and temporarily reducing Zone 3B crest width due to limited mine waste.
- The underdrainage system was redesigned. The original design called for above-ground toe and finger drains with rockfill. This was revised to below-ground drains by excavating 0.5 m trenches, installing coil pipes, and backfilling with drainage material to prevent washout during commissioning.
- Decant water recovery: the planned rock ring and causeway for Stage 3 were deferred after reassessment identified IPTSF (Stage 1) as a suitable interim recovery point. Decant structures will now be installed during Stage 4, aligning with the revised water management strategy. Stage 4 and 5 will be the subject of future approvals.
- The seepage interception trench downstream of the embankment was postponed because natural ground grading directs seepage to the Stage 3 sump, minimizing risk. The trench remains a contingency for future stages if seepage occurs.

These changes were found to be acceptable.

Monitoring instrumentation, including Vibrating Wire Piezometers and groundwater monitoring bores, has been installed to track seepage movement and groundwater conditions throughout the operation of IWLTSF (Stage 3).

Groundwater monitoring bores

Additional groundwater monitoring bores have been installed (under works approval W6724/2022/1) at four locations around the Stage 3 section of the IWLTSF ((MB07D/MB07S, MB08, MB09 and MB010). These bores were installed on 15 and 24 November 2024. These bores will be used to monitor potential groundwater mounding and water quality variations around the IWLTSF. Bore construction compliance report was submitted to the department on 17 December 2024 and was found to be compliant on 15 January 2025.

Works approval W6724/2022/1 also required another bore (MB06) to be installed as part of stage 3. This bore was installed on 14 September 2023 and compliance documentation was submitted to the department and found to be compliant on 19 February 2024. Location of the new bores are shown in Figure 1 below.

Baseline monitoring of the bores were undertaken in August and December of 2024. At the time of sampling MB08, MB09 and MB10 were dry. Monitoring results for bores MB06, MB07S and MB07D are showing in Table below:

Table 2: Baseline monitoring results for monitoring bores

Parameter	MB06	MB07D	MB07S
Date	18/08/2024	02/12/2024	02/12/2024
SWL (top of casing)	14.74	6.85	6.83
Casing height	0.839	0.634	0.61
SWL (mbgl)	13.901	6.216	6.22
Bore RL	474.55	468.68	468.73
SWL RL	460.64	462.46	462.51
Bore Depth	69	76	30
Top of Slotted Casing	49	63	17.5
pH	7.7	7.3	6.83
TDS	90400	131000	18000
Hydroxide	<1	<1	<1
Carbonate	<1	<1	<1
Bicarbonate	271	117	172
Total Alkalinity	280	117	172
Sulfate (SO4)	6740	10500	2150
Chloride (Cl)	37500	66200	8860
Calcium (Ca)	577	1160	214
Magnesium (Mg)	1900	2530	332
Sodium (Na)	27800	39900	5820
Potassium (K)	1220	1480	84
Antimony (Sb)	<0.01	<0.02	0.055
Arsenic (As)	<0.01	<0.02	0.004
Cadmium (Cd)	<0.001	0.002	<0.0002
Chromium (Cr)	<0.01	<0.02	<0.002
Cobalt (Co)	<0.01	<0.02	<0.002
Copper (Cu)	<0.01	<0.02	<0.002

Lead (Pb)	<0.01	<0.02	<0.002
Manganese (Mn)	0.153	0.33	0.054
Molybdenum (Mo)	<0.01	<0.02	0.016
Nickel (Ni)	<0.01	<0.02	0.005
Selenium (Se)	<0.01	<0.02	<0.02
Thallium (Tl)	<0.01	<0.02	<0.002
Zinc (Zn)	<0.01	0.444	0.281
Iron (Fe)	<0.5	<1.00	<0.1
Mercury (Hg)	<0.0002	<0.0005	<0.0001
Nitrite (NO2)	0.44	0.52	4.47
Nitrate (NO3)	29.7	17.1	10.6
Nitrite + Nitrate	30.1	17.6	15.1
Total Anions	1200	2090	298
Total Cations	1420	2040	293
Total Cyanide	<0.04	<0.04	<0.04
WAD Cyanide	<0.04	<0.04	<0.04

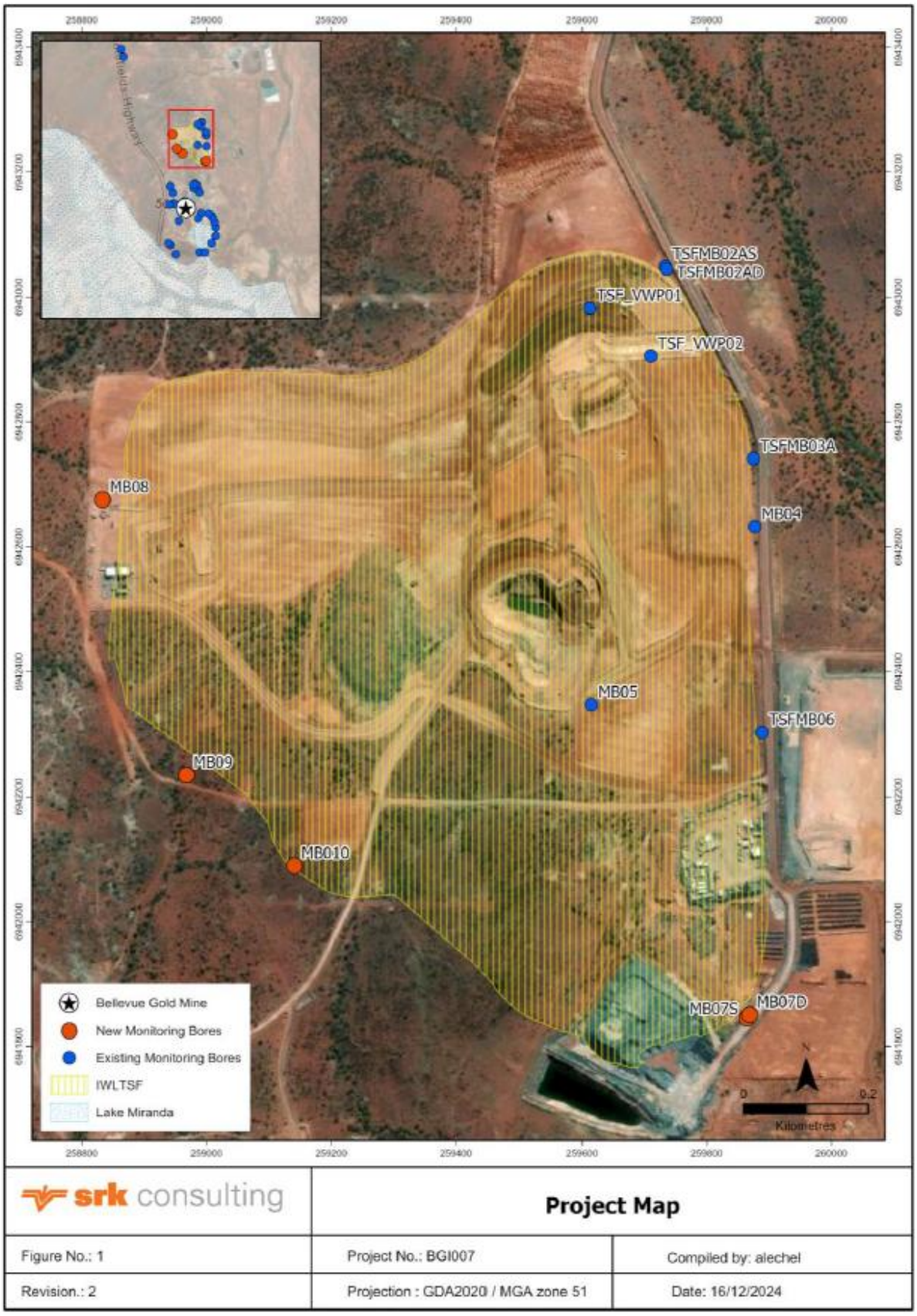

Figure 1: Location of new groundwater monitoring bores.

3. Risk assessment

The department assesses the risks of emissions from prescribed premises and identifies the potential source, pathway and impact to receptors in accordance with the *Guideline: Risk assessments* (DWER 2020).

To establish a Risk Event there must be an emission, a receptor which may be exposed to that emission through an identified actual or likely pathway, and a potential adverse effect to the receptor from exposure to that emission.

3.1 Source-pathways and receptors

3.1.1 Emissions and controls

The key emissions and associated actual or likely pathway during premises operation which have been considered in this Amendment Report are detailed in Table below. Table also details the proposed control measures the Licence Holder has proposed to assist in controlling these emissions, where necessary.

Table 3: Licence Holder controls

Emission	Sources	Potential pathways	Proposed controls
Saline water	Transport of decant water from Historical TSF to the process water ponds Discharge of water from RO plant into Henderson pit Seepage from Henderson	Overland runoff from pipeline leaks Overtopping of pit and process ponds Vertical seepage from Henderson Pit to groundwater Lateral seepage to surface water body	• Daily visual inspections of pipelines and regular monitoring of pipeline network. • Immediate reporting and cleanup of all spills. • Pipelines contained in an earthen bund/V-drains • 1.5 m Freeboard maintained on Henderson pit • Regular monitoring of freeboard at pit. • Regular monitoring of discharge volumes as per licence / approval requirements. • Monitoring bore installed at the Henderson pit to monitor groundwater level. • Process water ponds are Lined with a HDPE liner • A freeboard of 300mm is maintained from the top of the process water pond (western dam), the raw water dam (eastern dam) flows into the western dam via an overflow. Freeboard is monitored via a level sensor and high-level alarm in control room
Tailings /	Deposition of tailings	Overland runoff	• Daily visual inspections of

Emission	Sources	Potential pathways	Proposed controls
return water	into IWLTSF (Stage 3)	from pipeline leaks	pipelines and regular monitoring of pipelines. • Immediate reporting and cleanup of all tailings spills. • All tailings and associated return water pipelines (excluding pipelines which are situated on the IWLTSF embankments) are within an earthen bund which is sufficient to contain any spill for a period of time equal to the time between inspections. • Scour pits are constructed and located at low points along the length of the pipeline corridor. Existing licence conditions include: Condition 1 – Requirement to immediately recover, remove and dispose of any spills of environmentally hazardous materials. Condition 2 – Tailings and return water pipelines must be operated and maintained within secondary containment with adequate capacity to contain any spill for a period equal to the time between routine inspections. Condition 2 – Tailings and return water pipelines must be equipped with remote monitoring to detect spills. Condition 2 – Tailings and return water pipelines must be inspected once every 12 hours during operations.
Decant water		Direct ingestion by terrestrial fauna and avifauna	• No additional controls proposed Existing controls include: • Cyanide concentrations in tailings slurry will be regularly monitored by a CN analyser at the processing plant. • Hydrocarbon peroxide will be added to the tailings slurry, where cyanide concentrations were found to have exceeded internal limits. • IWLTSF Stage 3 and associated return water ponds will be

Emission	Sources	Potential pathways	Proposed controls
			inspected daily, including for usage by fauna. • Discharge of hypersaline tailings slurry (based on hypersaline process water) will reduce palatability of water for faunal ingestion. • Pre-leach and tailings thickeners will be utilised to reduce decant water available for faunal ingestion.
Tailings		Overtopping of IWLTSF stage 3	• Design freeboard for the IWLTSF Stage 3 was designed to be sufficient to contain rainfall from a 1:100 annual exceedance probability (AEP) storm event for 72 hours. • • Routine freeboard monitoring will be undertaken at the IWLTSF Stage 3 embankments
Tailings Leachate	Deposition of tailings into IWLTSF (Stage 3)	Vertical infiltration and lateral migration of seepage through base and walls of IWLTSF (Stage 3)	• IWLTSF Stage 3 embankments have been constructed with compacted mine waste, low permeability materials, and HDPE liner on the inner wall to minimise seepage. • Underdrainage system and cut-off trench have been installed • New monitoring bores installed and monitored. • Existing controls include: - Decant water will be recovered to maximise consolidation of tailings - Pre-leach and tailings thickeners will be utilised to maximise tailings density prior to deposition at IWLTSF Stage 3 Existing licence conditions include: • Condition 2 – At the Vanguard in-pit TSF (Stage 1), the floating decant pump must be moved and positioned to effectively remove decant water from the in-pit TSF. • Condition 12 – Requirement to continuously monitor volume of tailings discharged into the

Emission	Sources	Potential pathways	Proposed controls
			TSF • Condition 13 – Monitoring bores associated with the IWLTSF must be monitored monthly for standing water level and chemical parameters.

3.1.2 Receptors

In accordance with the *Guideline: Risk assessments* (DWER 2020), 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 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

Human receptors	Distance from prescribed activity
No human receptors	N/A
Environmental receptors	**Distance from prescribed activity**
Native vegetation	Based on aerial imagery, native vegetation is present throughout the premises and abuts key infrastructure for the proposed activities, though their condition is likely degraded to some extent due to historic mining activities.
Priority ecological communities	The premises is located within a Priority 1 'Violet Range (Perseverance Greenstone Belt) vegetation complexes (banded ironstone formation', which overlaps with the proposed activities (e.g., processing plant, IWLTSF Stage 2, Henderson Pit, Westralia Pit, treated wastewater pipeline, etc) (Figure 5). The licence holder stated that the majority of the PEC within the premises is in a degraded state due to historical mining activities. While not within the premises, other PECs are also present around the premises, including the Priority 1 'Yakabindie calcrete groundwater assemblage type on Carey palaeodrainage on Yakabindie Station' and Priority 1 'Lake Miranda east calcrete groundwater assemblage types on Carey palaeodrainage on Yakabindie Station' (Figure 5). While these are unlikely to be directly impacted by the proposed activities, they are closely associated with the nearby Lake Miranda, which may be impacted by the proposed activities
Fauna	A total of 110 vertebrate fauna species were observed within the broader Project area (Bamford Consulting Ecologists 2020). Five were identified as being species of conservation significance, including: Common Greenshank (*Tringa nebularia*) – Listed under the EPBC Act as Marine & Migratory Sharp-tailed Sandpiper (*Calidris acuminata*) – Listed under the EPBC Act as

	Marine & Migratory Sandplain worm-lizard (*Aprasia repens*) – Listed as a species of local significance Australian Bustard (*Ardeotis australis*) – Listed as a species of local significance Bush Stone-curlew (*Burhinus grallarius*) – Listed as a species of local significance Several other conservation significant fauna, primarily migratory wetland birds, were identified as potentially occurring at the broader surroundings of the premises, though they were not sighted during the formal survey program.
Surface water lines	Ephemeral streams intersect throughout the premises and flow towards Lake Miranda
Surface water bodies	Lake Miranda is located approximately 1 km south of IWLTSF stage 3 and approximately 1.4 km west of Henderson Pit
Conservation significant flora	There were no Threatened Flora species identified within the Project area, however Three Priority Flora species were identified: • *Grevillea inconspicua* (Priority 4); • *Hibiscus sp. Perrinvale* Station (Priority 3); and • *Goodenia lyrata* (Priority 3). The Violet Range (Perseverence Greenstone) BIF Priority Ecological Community (PEC) occurs within the broader Project area. The majority of the PEC in the BGP is in a degraded state due to historical mining activities (NVS 2022). Activities related to the works approval amendment do not directly impact this area.
Groundwater	The primary aquifer of relevance to mining and dewatering activities is the fractured rock aquifer, comprising greenstones, granitoids and minor intrusive rocks. As the greenstone belt is aligned in a north-to south orientation, the associated faults and fractures are also in this alignment. Known paleochannel aquifer systems are located to the south and east of the premises. Pre-mining water table at the premises ranged between 15 mbgl and 30 mbgl, with relatively flat hydraulic gradient towards the south, which was consistent with regional groundwater flow direction following major paleodrainage lines towards Lake Miranda, which acts as a groundwater sink. Accordingly, the water table at Lake Miranda is significantly shallower than at the premises, typically at 2 mbgl or less. Groundwater was characterised as hypersaline, with total dissolved solids from 90,000 mg/L to 120,000 mg/L. The premises is located within the Goldfields Groundwater Area, where groundwater is primarily abstracted for mining and ore processing purposes
Cultural Receptors	**Distance from prescribed activity**
Aboriginal heritage site	A number of registered Aboriginal cultural heritage sites are located within the premises. These sites primarily consist of locations for ritual and ceremonies, creation/dreaming narrative, and artefacts and scatter. The premises also overlaps with the Yakamunti A-B (Place ID 2698; creation/dreaming narrative) and Lake Miranda (Katawili) (Place ID 1301; ritual/ceremonial,

	creation/dreaming narrative, plant resource) heritage sites, which encompass the Lake Miranda salt lake area. To manage these heritage sites, the licence holder has executed a Native Title Agreement with the Tjiwarl Aboriginal Corporation in September 2022 to ensure that cultural and heritage considerations have been included in the design and layout of the premises, protecting sensitive areas, and developing a co-design Cultural Heritage Management Plan to manage ongoing activities

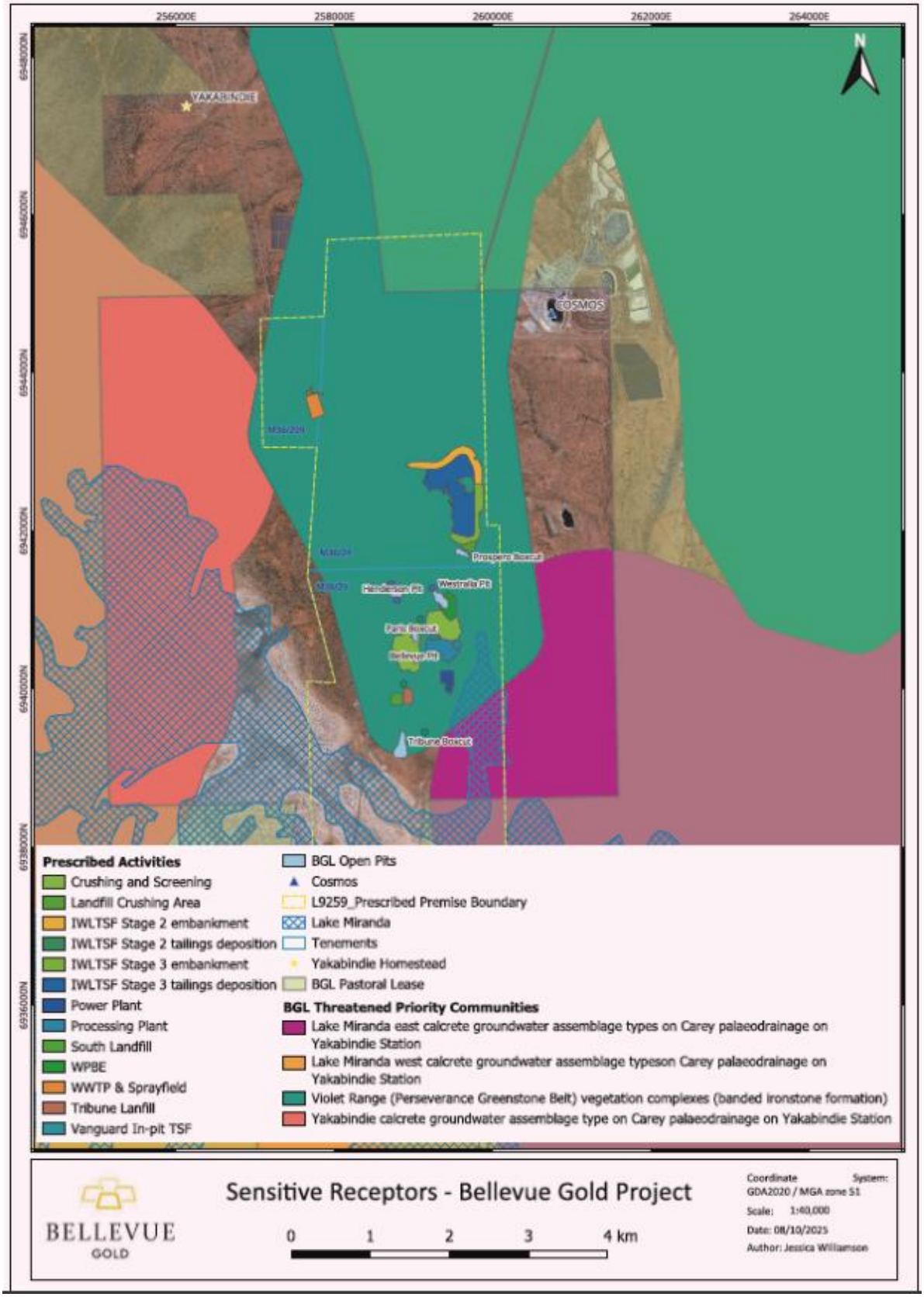

Figure 1: Priority ecological communities and surface water bodies at the premises

3.2 Risk ratings

Risk ratings have been assessed in accordance with the *Guideline: Risk Assessments* (DWER 2020) for those emission sources which are proposed to change and takes into account potential source-pathway and receptor linkages as identified in Section 3.1. Where linkages are in-complete they have not been considered further in the risk assessment.

Where the 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 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 .

The Revised Licence L9259/2020/1 that accompanies this Amendment Report authorises emissions associated with the operation of the Premises i.e. 5 and 6 activities.

The conditions in the Revised Licence have been determined in accordance with *Guidance Statement: Setting Conditions* (DER 2015).

Table 5. Risk assessment of potential emissions and discharges from the Premises during operation

Risk Event					Risk rating[1] C = consequence L = likelihood	Licence Holder's controls sufficient?	Conditions[2] of licence	Justification for additional regulatory controls/ DWER comments
Source/Activities	**Potential emission**	**Potential pathways and impact**	**Receptors**	**Licence Holder's controls**				
Construction								
Installation of new pipelines from RO plant to Henderson Pit and from historical TSF to the process water dams.	Dust	Pathway: Air / windborne pathway Impact: Impact to ecological health	Native vegetation, including priority flora	Refer to Section 3.1	C = Slight L = Unlikely **Low risk**	Y	N/A	N/A
Operation								
Category 5								
Deposition of tailings into IWLTSF (Stage 3)	Tailings / return water	Overtopping of IWLTSF Stage 3 causing impacts to ecological health	Vegetation Ephemeral surface water lines Lake Miranda Aboriginal heritage sites	Refer to Section 3.1	C = Moderate L = Unlikely **Medium Risk**	Y	Condition 2 - operational requirements Condition 4 and 11 – freeboard requirements – updated to include Stage 3 Condition 5 – inspection requirements – updated to include Stage 3 Condition 15 – Emission and discharge monitoring – updated to include Stage 3	Existing conditions adequately mange this risk event. Conditions around freeboard and freeboard inspections have been updated to include Stage 3

Risk Event					Risk rating[1] C = consequence L = likelihood	Licence Holder's controls sufficient?	Conditions[2] of licence	Justification for additional regulatory controls/ DWER comments
Source/Activities	**Potential emission**	**Potential pathways and impact**	**Receptors**	**Licence Holder's controls**				
	Leachate	Seepage from base and walls of TSF causing groundwater mounding reaching root zone of vegetation /soil contamination. Changes in water chemistry of groundwater, with potential impact to Lake Miranda	Vegetation Lake Miranda Groundwater	Refer to Section 3.1	C = Moderate L = Possible **Medium Risk**	Y	Condition 2 – Infrastructure operational requirements Condition 5 – Inspection requirements Condition 17 – Ambient groundwater monitoring requirements Condition 18 to 20 – Seepage Management Plan Requirements Condition 22 – Water balance monitoring requirements	Additional groundwater monitoring bores have been installed (under works approval W6724/2022/1) at four locations around the Stage 3 section of the IWLTSF ((MB07D/MB07S, MB08, MB09 and MB010). Baseline monitoring of the bores was undertaken in August and December of 2024. At the time of sampling MB08, MB09 and MB10 were dry. Monitoring results for bores MB06, MB07S and MB07D indicate that standing water levels are between 6.2-14 mbgl. During the last amendment which authorised operation of stage 2 IWLTSF it was determined that additional regulatory controls were required to manage the risk of potential impacts from the IWLTSF seepage on receptors. These existing conditions include: • Condition 2 – Requirement to maintain backup pumps and generators, as well as telemetry for the IWLTSF underdrainage system; • Condition 17 – Specifying a target and limit value of 6.0 mbgl and 5.0 mbgl for standing water level at groundwater monitoring bores associated with IWLTSF; and

Risk Event					Risk rating[1] C = consequence L = likelihood	Licence Holder's controls sufficient?	Conditions[2] of licence	Justification for additional regulatory controls/ DWER comments
Source/Activities	**Potential emission**	**Potential pathways and impact**	**Receptors**	**Licence Holder's controls**				
								• Conditions 18 to 20 – Requirement to prepare, submit, and implement a Seepage Management Plan, in the event the target for standing water level in a groundwater monitoring bore was exceeded at IWLTSF The department has determined to add the new stage 3 monitoring bores to the licence and to apply the same target and limit value of 6mbgl and 5mbgl for standing water level to manage this risk event for stage 3.
	Decant water	Direct ingestion by terrestrial fauna, avifauna causing impacts to ecological health	Fauna including conservation significant species and migratory birds	Refer to Section 3.1	C = Moderate L = Unlikely **Medium risk**	Y	Condition 2 – Infrastructure operational requirements Condition 16 – Surface water monitoring requirements – updated for stage 3	No additional regulatory controls required as existing licence conditions adequately mange this risk event. Conditions regarding the routine monitoring of WAD CN and TDS at the decant pond of the IWLTSF (stage 3) will ensure oversight over the risk to birds. These conditions have been updated to include stage 3
	Tailings / return water	Loss of containment (e.g., pipeline leaks and ruptures, sump overflow),	Vegetation Lake Miranda	Refer to Section 3.1	C = Moderate L = Possible **Medium risk**	Y	Condition 1- Spill management requirements Condition 3 – Pipeline requirements	No additional regulatory controls required as existing licence conditions adequately mange this risk event.

Risk Event					Risk rating[1] C = consequence L = likelihood	Licence Holder's controls sufficient?	Conditions[2] of licence	Justification for additional regulatory controls/ DWER comments
Source/Activities	**Potential emission**	**Potential pathways and impact**	**Receptors**	**Licence Holder's controls**				
		resulting in discharge to land causing impacts to ecological health					Condition 5 – Inspection requirements	
Transport and discharge of decant water from Historical TSF to Process water ponds	Historical TSF decant water	Overtopping of process water ponds leading to direct discharge to land	Vegetation Ephemeral surface water lines	Refer to Section 3.1	C = Minor L = Unlikely **Medium Risk**	Y	Condition 2 - operational requirements – updated to include freeboard	Process water ponds are lined with HDPE so seepage is not expected. Condition 2 has been updated to require process water ponds to have a freeboard
	Historical TSF decant water	Loss of containment (e.g., pipeline leaks and ruptures, sump overflow), resulting in discharge to land causing impacts to ecological health	Vegetation Lake Miranda	Refer to Section 3.1	C = Minor L = Unlikely **Medium risk**	Y	Condition 1- Spill management requirements Condition 3 – Pipeline requirements Condition 5 – Inspection requirements (updated) Condition 7 - pipeline construction requirements added Condition 10 – authorised discharge points (stage 3 updated)	Existing licence conditions adequately mange this risk event. Relevant conditions have been updated to include new pipelines.
Other								
Discharge of water	Saline water	Overtopping of	Vegetation	Refer to	C = Moderate	Y	Condition 4 – 1.5m	During the last amendment to this

Risk Event					Risk rating[1] C = consequence L = likelihood	Licence Holder's controls sufficient?	Conditions[2] of licence	Justification for additional regulatory controls/ DWER comments
Source/Activities	**Potential emission**	**Potential pathways and impact**	**Receptors**	**Licence Holder's controls**				
from RO plant into Henderson pit		pit resulting in a direct discharge to land causing impacts to ecological health	Ephemeral surface water lines Lake Miranda	Section 3.1	L = possible **Medium Risk**		freeboard requirement Condition 5: Twice daily inspection requirement for freeboard Condition 11: discharge limit (updated) Condition 15: monitoring of volume of water discharged (updated).	licence it was noted by the department that Henderson Pit has limited available storage capacity and is close to reaching the specified freeboard on the licence (1.5m below crest level). Based on the most recent pit standing water level monitoring event in October 2024, the Henderson pit lake level is at 465.9 mAHD (i.e., leaving a 2.62 m allowance before reaching the freeboard). Condition 5 was updated during the last amendment to require twice daily freeboard inspections of the Henderson pit due to this limited capacity. As the volume of RO water to be discharged is small the department has determined to authorise this discharge. It is the licence holder's responsibility to adequately manage discharge volumes in order to maintain compliance with the required freeboard. The existing conditions adequately manage this risk event and they have been updated to include this new discharge.
		Direct discharge to land via pipeline leaks causing impacts to vegetation (waterlogging	Vegetation Ephemeral surface water lines	Refer to Section 3.1	C = Minor L = Unlikely **Medium Risk**	Y	Condition 3 – Pipeline requirements Condition 5 – inspection requirements (of pipelines)	Existing conditions adequately manage this risk. Condition 5 has been updated to include this new pipeline.

Risk Event					Risk rating[1] C = consequence L = likelihood	Licence Holder's controls sufficient?	Conditions[2] of licence	Justification for additional regulatory controls/ DWER comments
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Licence Holder's controls				
		and salts)						
Seepage from Henderson Pit	Saline water	Vertical seepage to groundwater Lateral seepage to surface water body resulting in seepage and surface expression to land, and potentially impacting surrounding native vegetation (including priority ecological communities) and surface waterbodies.	Groundwater Native vegetation Lake Miranda	Refer to Section 3.1	C = Minor L = Unlikely **Medium Risk**	Y	Condition 5 – Inspection requirements Condition 10 – Authorised emission points Condition 11 – Emission limits Condition 17 – Ambient groundwater monitoring requirements Condition 22 – Water balance monitoring requirements	The standing water level at monitoring bore HEN01 near the Henderson pit fluctuated between 15 mbgl and 17 mbgl during the 2023/2024 annual period. It is not expected that the addition of the RO plant water will significantly impact SWL surrounding Henderson pit to the extent that mounding would impact vegetation at the surface. Quality of the discharge water is also acceptable. Therefore, no additional regulatory controls are required, and existing conditions are adequate to manage this risk event.

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

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

4. Consultation

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

Table 6: Consultation

Consultation method	Comments received	Department response
Licence Holder was provided with draft amendment on 10 December 2025	Refer to Appendix 1	Refer to Appendix 1

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.

5.1 Summary of amendments

Table 7 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 7: Summary of licence amendments

Condition no.	Proposed amendments
2	Freeboard added for process and water ponds Integrated waste landform tailings storage facility (IWLTSF Stage 3) operational requirements added to table 1.
3	Updated to include new figures referring to new pipeline locations
4	Updated to include IWLTSF stage 3
5	Updated to include IWLTSF stage 3 and new pipelines.
7	Updated to include new pipeline construction requirements.
10	Updated to include reject water from RO plant to Henderson pit as new discharge Updated to include IWLTSF stage 3
11	Updated to include reject water from RO Plant discharge limit Updated to include IWLTSF stage 3
15	Updated to include reject water from RO Plant discharge limit Updated to include IWLTSF stage 3
16	Updated to include IWLTSF stage 3
17	Updated to include IWLTSF stage 3 monitoring bores
Schedule 1	Figure 1 updated to show IWLTSF stage 3 Figure 2a replaced with Figures 2a and 2b Figure 2b added to show new pipeline routes

References

1. Department of Environment Regulation (DER) 2015, *Guidance Statement: Setting Conditions*, Perth, Western Australia.
2. Department of Water and Environmental Regulation (DWER) 2020, *Guideline: Environmental Siting*, Perth, Western Australia.
3. DWER 2020, *Guideline: Risk Assessments*, Perth, Western Australia.
4. DWER 2025, Amendment Report, 4 September 2025, Perth, Western Australia.

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

Condition	Summary of Licence Holder's comment	Department's response
3	Map 2a the pipeline from the RO Plant to Henderson pit has been separated out from the Treated water pipeline, attached new Figure X. Please note this pipeline will be located (for the majority) within the same pipeline route as the treated water pipeline.	Inserted Figure as Figure 8
3	The Historical TSF to process ponds pipeline has been separated out from the dewatering pipelines, attached new Figure X (same as above Figure). The Historical TSF pipeline will follow (for the majority) the existing dewatering pipeline routes and will follow either one of the two routes as illustrated in Figure X, this will be finalised when the pipeline is constructed.	Inserted as Figure 8
2	Table 1, Item 5, (green highlight) Bellevue can confirm that 484.5 is the correct constructed embankment height.	Value confirmed.
7	Please can Item 2 Table 5 be removed from the licence, a compliance report was issued to the DWER for this and the pipeline location in Map 2a is correct.	Updated, item 2 removed.
11	Table 7 IWLTSF (Stage 2 and 3) (highlight green), maximum "tailings elevation" is 300 mm below crest level and therefore the freeboard for tailings elevation is 484.2 mAHD. 500 mm needs to be changed to 300 mm, unless you reword this to say maximum pond elevation to allow freeboard of at least 500 mm (beach and operational freeboard) then it will be 484 mAHD.	Updated to reflect pond elevation.
15	Table 8 (highlight green), Henderson Pit, the flow meter for the reject water from the RO plant will be located at the RO plant.	Updated.