



Application for Licence Amendment

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

Licence Number	L7798/1993/6
Licence Holder	Silver Lake (Deflector) Pty Ltd
ACN	101 224 999
File Number	APP-0035185
Premises	Gullewa Gold-Copper Operations Legal description – M59/49, L59/49, L59/64, M59/68, M59/132, M59/294, M59/356, M59/391, M59/392, M59/335, M59/442, L59/35, M59/507, M59/336, M59/522, L59/71, L59/158, L59/159 and L59/160 Morawa – Yalgoo Road As defined by the premises maps attached to the revised licence
Date of Report	30 June 2026
Decision	Revised licence granted

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1. Decision summary

Licence L7798/1993/6 is held by Silver Lake (Deflector) Pty Ltd (licence holder) for the Gullewa Gold-Copper Operations (the premises), located within Morawa on Yalgoo Road.

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 L7798/1993/6 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 23 April 2026, the licence holder submitted an application to the department to amend licence L7798/1993/6 under section 59 and 59B of the *Environmental Protection Act 1986* (EP Act). The following amendments are being sought:

- Inclusion of TSF2 staged embankment lifts and operating heights as assessed and approved in works approval W6407/2020/1.
- Extension of licence expiry by 10 years as licence is due to expire on 30 November 2026.

This amendment is limited only to the changes listed above, no changes to the current assessed production / design capacities have been proposed.

2.3 Works approval W6407/2020/1

Works approval W6407/2020/1 was granted on 25 November 2020 for the approval to construct a new Tailings Storage Facility (TSF2), Carbon in Pulp (CIP) Leach Upgrade circuit and a new wastewater treatment plant (WWTP). Licence L7798/1993/6 was amended in 2023 to add the CIP circuit and TSF2 to the licence and in 2025 to add the WWTP, as constructed under W6407/2020/1.

TSF2 is an above ground paddock style tailings storage facility with approved embankment heights as per works approval W6407/2020/1 shown in Table 1.

Table 1: TSF2 construction schedule

Raises	Crest height (mRL)	Schedule
Cell A – starter embankment	290.50	Constructed July 2021
Cell A - raise 1	293.50	Constructed March 2025
Cell A - raise 2	296.75	March 2028

Raises	Crest height (mRL)	Schedule
Cell B – starter embankment	289.00	Constructed May 2021
Cell B - raise 1	292.00	Constructed August 2023
Cell B - raise 2	295.25	August 2026

To date, Cell B – Raise 1 and Cell A – Raise 1 has been constructed. A Critical Containment Infrastructure Report for the raises was received by the department on 14 September 2023 and 13 August 2025. After a review of the reports, the construction of both raises and associated infrastructure was found compliant with the conditions of the works approval. Further raises are proposed to occur within the following years, as per Table 1. Construction requirements for the future raises have been included in Condition 9 – Table 6 within the licence.

2.3.1 TSF2 Design

The completed starter embankments of TSF2 are zoned embankments comprising an upstream zone of low permeability roller compacted clays and/or HDPE impermeable liner and a downstream zone of traffic compacted mine waste material. The embankment raise will utilise compacted clayey material sourced from approved borrow areas or compacted dried tailings with rock armouring.

The perimeter embankments raise will have design slopes of 1(V):2(H) upstream and 1(V):3(H) downstream. The compacted upstream zone (clay) will have a crest width of 8 m. The upstream embankment crest will have a 2 % cross-fall towards the upstream side and 0.5 m high mine waste windrow at the downstream crest. Cross sections and detail are shown in figures 1 and 2.

The TSF has been designed such that a 1 in 100 yea AEP, 72 hour duration storm event can be temporarily stored on top of the facility.

There is no variation to the design as proposed and approved in works approval W6407/2020/1. TSF2 is currently operating in accordance with condition 4 of licence L7798/1993/6.

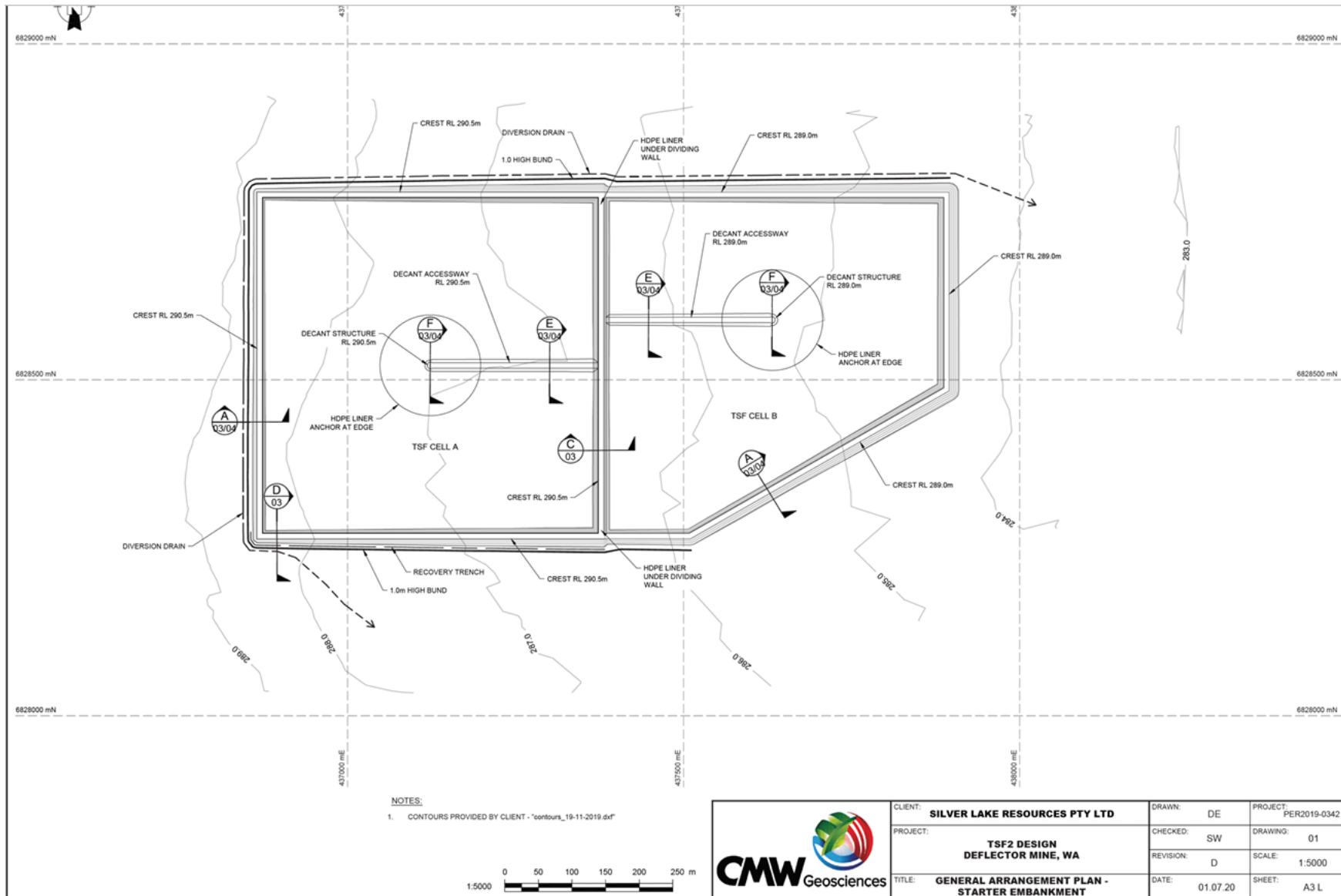


Figure 1: TSF2 layout

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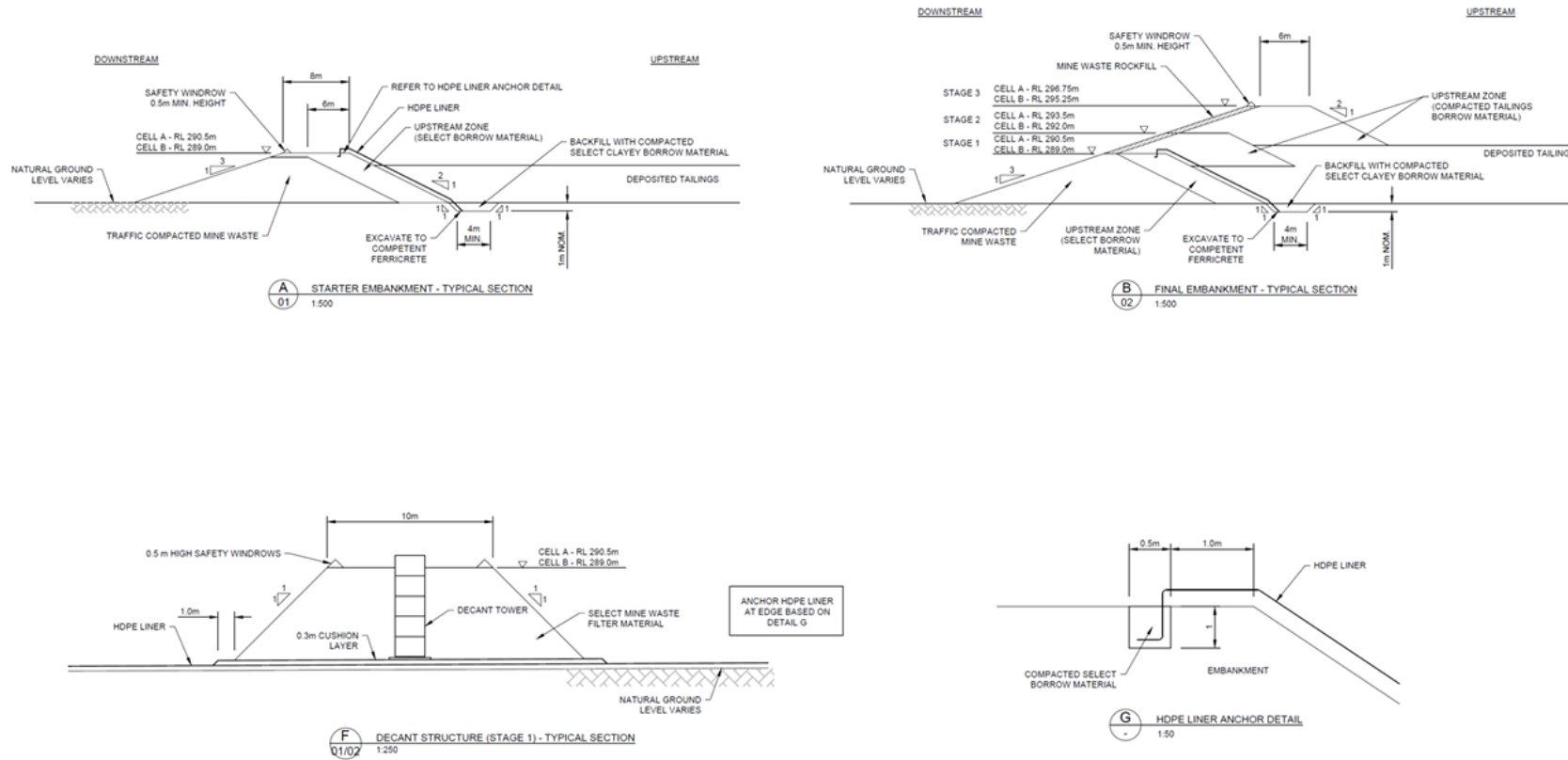


Figure 2: TSF2 detail

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	CLIENT:	SILVER LAKE RESOURCES LTD.	DRAWN:	JSA	PROJECT:	PER2019-0342
	PROJECT:	TSF2 DESIGN DEFLECTOR MINE, WA	CHECKED:	SW	DRAWING:	04
	TITLE:	SECTIONS AND DETAILS SHEET 2	REVISION:	B	SCALE:	AS SHOWN
			DATE:	01.07.20	SHEET:	A3 L

2.4 Other approvals

The licence holder currently holds a licence to take water (GWL168757(8)) for the abstraction of 4,700,000 kL of groundwater per annum for dewatering, dust suppression, mineral ore processing etc.

Additionally, Mining Proposal (Reg ID 100992) has been approved by the Department of Mines, Petroleum and Exploration (DMPE) for the construction and operation of TSF2 within mining tenement M59/442.

2.5 Licence duration extension

Licence L7798/1993/6 is currently due to expire on 30 November 2026. Therefore, the licence holder has requested the extension of licence expiry for a further 10 years to support the life of mine and ongoing exploration.

Upon an internal review of the department's Incidents and Complaints Management System (ICMS), a small number of reported exceedances / non compliances were identified over the past five years. Some of these incidents include the exceedance of some parameters during the soil sampling investigation, which were noted in ICMS for trend analysis. Additionally, the licence holder reported three separate unauthorised discharges due to a scour pit valve failure, failure of pollution control equipment and failure of a tailings pipeline due to contact from machinery. These discharges were contained within existing infrastructure and reported as no or minimal impact discharges.

The department has accepted the proposal to extend the licence expiry by 10 years, as there have been no major non-compliances with licence conditions and noting the department can initiate an amendment to the licence at any time in accordance with section 59(2) of the EP Act.

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

Table 2: Licence holder controls

Emission	Sources	Potential pathways	Proposed controls
<i>Proposed controls are the same as those proposed and approved under works approval W6407/2020/1.</i>			
Construction			
Dust	Construction of the TSF2 lifts	Air/windborne pathway	<ul style="list-style-type: none"> Water carts onsite to manage dust generation during construction of TSF2 lifts.
Operation			
Tailings / decant water	Overtopping of the TSF during extreme weather events	Direct discharge to land	<ul style="list-style-type: none"> Freeboard of 500 mm with capacity for a 1:100, 72 hour storm event. TSF2 is inspected once a shift.
Seepage	Seepage of tailings through base of TSF	Seepage to soils and groundwater	<ul style="list-style-type: none"> A 150 m diameter HDPE liner (with a minimum of 10⁻⁸ m/sec permeability) is constructed around each decant structure. Multipoint spigotting from the cell perimeter embankment with continuous water recovery from a central decant within each cell. A seepage recovery system at the south west corner of the TSF2. The recovery system comprises a shallow trench backfilled with clean competent waste grading to a sump. Water recovered in the sump will be pumped back into TSF2. Re-use of decant water in the Deflector Processing Facility.
Tailings / decant water	Rupture of tailings pipeline	Direct discharge to land	<ul style="list-style-type: none"> All pipes are banded with telemetry installed on the tailings line. Pipelines are inspected once a shift.

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 3 below provides a summary of potential human and environmental receptors that may be impacted as a result of activities upon or emission and discharges from the prescribed premises (*Guideline: Environmental siting* (DWER 2020))

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

Environmental receptors	Distance from prescribed activity
Underlying groundwater (non-potable purposes)	<p>Groundwater is approximately 20 m below ground level predominantly within the lower saprolite layer, flowing in a south easterly direction toward Salt River, with a velocity of approximately 1 m/day (GRM 2018), equivalent to 1.15×10^{-5} m/s. No groundwater-dependent ecosystems have been identified during environmental assessments (DWER Works Approval W6407/2020/1).</p> <p>Groundwater is likely to be found in two distinct settings beneath the premises: in one or more bedrock aquifers that consist of fracture zones within basalts and other basement rocks; and in shallow regolith that overlies basement rocks. The bedrock aquifers will contain small amounts of saline to hypersaline groundwater on a permanent basis, whereas the shallow regolith forms an ephemeral perched aquifer that is only likely to contain fresh-brackish groundwater for short periods after heavy rainfall events.</p> <p>The rate of groundwater flow in fractured bedrock is likely to be limited by the generally low hydraulic conductivity of these materials. Additionally, the presence of dykes, faults or other structural features in the vicinity of the premises is likely to compartmentalise groundwater in bedrock into a number of distinct flow-systems that will only have a limited degree of hydraulic interconnection. This is supported by the large variations in groundwater salinity that are observed near the Premises.</p> <p>Groundwater at the TSF2 area is hypersaline, with TDS levels of between 35,000 to 44,000 mg/L. The high salinity is likely associated with the saline groundwater aquifer underlying the Salt River.</p>
Flora / vegetation	Flora on the premises and surrounds consists of Acacia shrubland vegetation. No groundwater dependent ecosystems or threatened flora species have been identified near the premises.
Surface water (Salt River, Burra Lake)	<p>Salt River</p> <p>The Salt River is located approximately 2.5 kilometres east of the TSF2 Cells A and B (Figure 3). Sheet flow from the surrounding catchment contributes to the Salt River during periods of heavy rainfall and it is the main drainage channel for the catchment. Water quality is highly saline (20,000 - 23,000 mg/L TDS) and alkaline (pH 8.3 - 8.4), with elevated concentrations of total nitrogen and some metals. The Salt River supports permanent pools of saline water in topographic lows. In the vicinity of the mine, the river flows in a southerly direction for approximately 15 km, before intercepting a chain of salt lakes including Burra Lake which is the local terminus.</p> <p>Burra Lake</p> <p>Burra Lake is a large shallow evaporative basin that experiences high evaporation rates and shallow water depths. During flooding events, the lake is highly productive, with primary producers comprising benthic algal mats and macrophytes providing a food source for a range of aquatic invertebrates and waterbirds. The riparian zone is dominated by samphire (<i>Tecticornia</i>) and several chenopod species. Burra Lake has also been affected by secondary salinisation, with the addition of salts from the river and the surrounding catchment via runoff. Burra Lake is located on a working pastoral station which is currently stocked with cattle.</p>

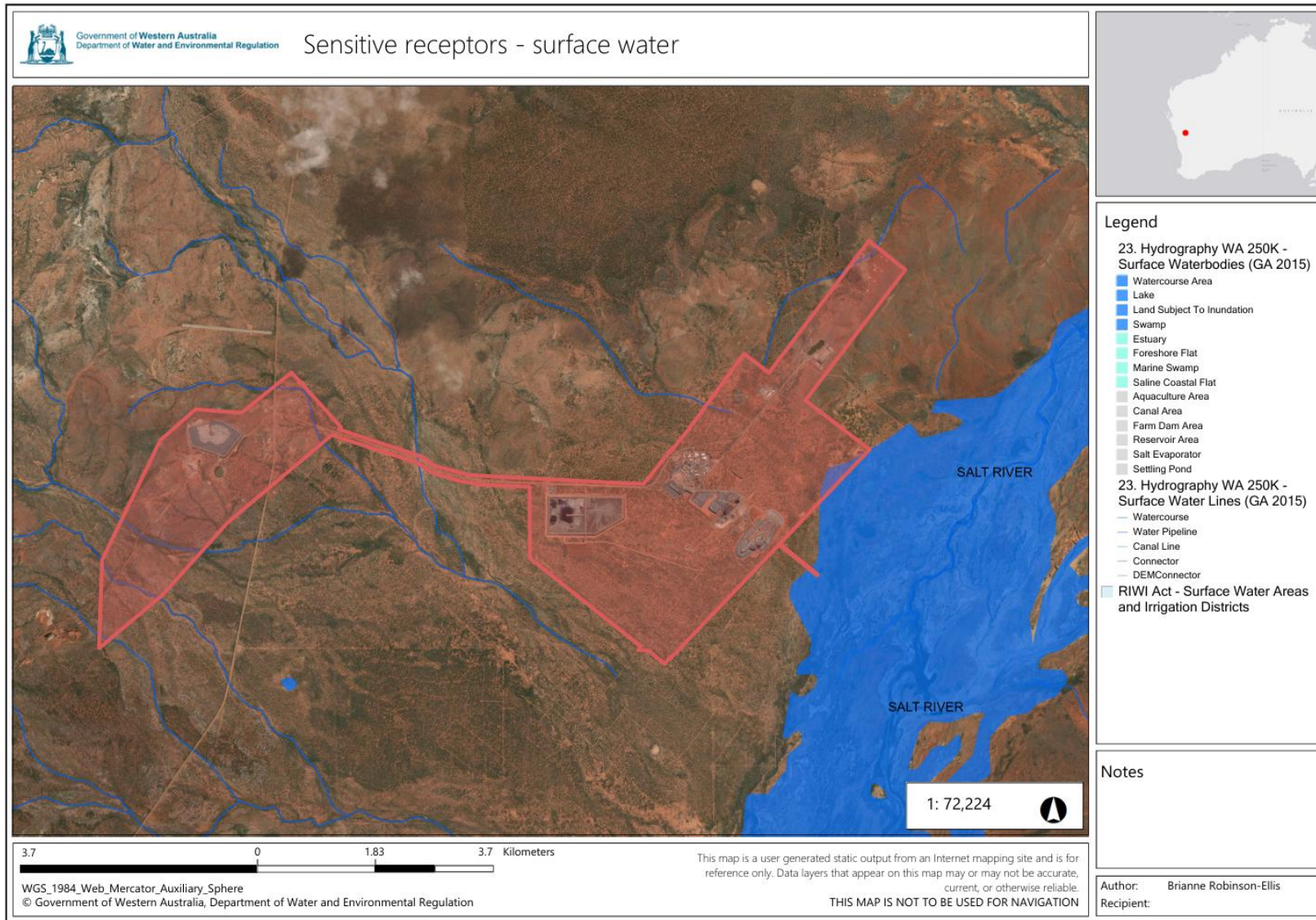


Figure 3: Distance to sensitive receptors

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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 incomplete they have not been considered further in the risk assessment.

Where the licence holder has proposed mitigation measures/controls (as detailed in Section 3.1), these have been considered when determining the final risk rating. Where the delegated officer considers the licence holder's proposed controls to be critical to maintaining an acceptable level of risk, these will be incorporated into the licence as regulatory controls.

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

The revised licence L7798/1993/6 that accompanies this amendment report authorises emissions associated with the operation of the premises i.e. category 5 activities.

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

Table 4. Risk assessment of potential emissions and discharges from the premises during construction and 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								
Construction of TSF2 raises	Dust	Pathway: Air/windborne pathway Impact: Decline in vegetation health and surface water quality	Flora / vegetation Surface water	Refer to Section 3.1	C = Slight L = Unlikely Low Risk	Y	Condition 9	The licence holder's proposed controls have been added to the existing condition 9. The delegated officer has determined the controls as sufficient to manage the risk to receptors.

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				
Operation								
Deposition of tailings into TSF2 Cells A and B	Tailings seepage	Pathway: Seepage of tailings through base of TSF Impact: Groundwater mounding potentially affecting surrounding vegetation and contaminating groundwater	Flora / vegetation Groundwater	Refer to Section 3.1	C = Moderate L = Possible Medium Risk	Y	Conditions 4, 22, 23, 32 and 35	The delegated officer has determined that existing conditions on the licence are sufficient to manage potential seepage and risks to receptors at TSF2.
	Tailings / slurry	Pathway: Overtopping of TSF Impact: Contamination of surrounding environment, infiltration to groundwater	Flora / vegetation Groundwater Surface water	Refer to Section 3.1	C = Moderate L = Rare Medium Risk	Y	Condition 4	The existing condition 4 requires the licence holder to maintain a minimum top of embankment freeboard of 500 mm at TSF2.
	Tailings / slurry	Pathway: Pipeline rupture or leak – direct discharge to land Impact: Ecosystem disturbance or impact to surface water quality	Flora / vegetation Surface water	Refer to Section 3.1	C = Moderate L = Unlikely Medium Risk	Y	Condition 6 and 22	Conditions 6 and 22 are existing licence conditions that require the licence holder to construct all pipes with bunding and telemetry. Additionally, regular inspections are to be undertaken of the pipelines.

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

Table 5: Consultation

Consultation method	Comments received	Department response
Application advertised on the department's website 28 May 2026	None received	N/A
Shire of Yalgoo advised of proposal 28 May 2026	None received	N/A
Department of Mines, Petroleum and Exploration (DMPE) advised of proposal 28 May 2026	<p>DMPE provided a response on 3 June 2026 advising that the previously approved Mining Proposal (Reg ID 100922) includes the construction of TSF2. Additionally, that the activities proposed in the amendment are generally in line with the activities approved in the Mining Proposal (MP).</p> <p>DMPE noted the MP approved a 4 m starter embankment height followed by two lifts of 3 m and 3.25 m and the works approval authorised construction to 7.5 m with the final crest height remaining unchanged.</p>	<p>The delegated officer notes this comment.</p> <p>Works approval W6407/2020/1 has previously assessed and approved the construction of TSF2, including the starter embankment and two additional raises to each cell. No changes to the original TSF design have been proposed in this licence amendment.</p>
Bundi Yamatji Aboriginal Corporation RNTBC advised of proposal 28 May 2026	None received	N/A
Licence holder was provided with draft amendment on 19 June 2026	The licence holder provided comments on 28 June 2026. Amendments to the dates of construction and proposed scheduled construction of the TSF2 raises were provided.	These dates have been updated within the amendment report.

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

Table 6: Summary of licence amendments

Condition no.	Proposed amendments
Cover page	Licence duration extended to 30/11/2036.
Licence history table	Amendment details added to licence history table.
Condition 9, Table 6	Construction requirements for the TSF2 Cell A and B raises added to Condition 9 – Table 6.

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. Groundwater Resource Management (GRM) 2018, *Deflector Gold Project: Gullewa Groundwater Study*, West Perth, Western Australia.