



Attachment 8: Additional Information Submitted

22 August 2024

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RE: Additional Information for L7750/2001/10 Licence Amendment

Evolution Mining (Mungari) Pty Ltd provides the Department of Water and Environmental Regulation (DWER) the information below to support the L7750/2001/10 Licence amendment application to expand processing infrastructure at the existing Mungari Gold Project. This licence amendment is important to Mungari operations as timely commencement of the next lift on TSF Cell 3 is required to commence without delay to maintain operational continuity. A summary of assessed and approved processing activities under current *Environmental Protection Act 1986* instruments has been provided as **Table 1**.

This Licence amendment application seeks to include the following on L7750/2001/10:

- Operation of the expanded Mungari Processing Plant (W6803/2023/1),
- Operation of the Cutters Ridge In-pit Tailings Storage Facility (W6862/2023/1) and an associated expansion of the Premises boundary,
- Operation of the Mungari TSF Cell 4 Stage 3 (W6364/2020/1), and
- Mungari TSF Cells 3 and 4 Stages 4 to 10 construction and operations (previously assessed under W6364/2020/1).

Background:

All stages (1-10) of TSF Cells 3 & 4 were assessed during considerations for W6364/2020/1 however the granted Works Approval only authorised construction and time-limited operations up to Stage 3 to align with the Mining Proposal and the proposed tenement condition requiring a TSF design report before any upstream lifts (Stages 4 to 10) commence.

Evolution proposes to construct and operate Mungari TSF Cells 3 & 4 upstream lifts Stages 4 to 10 under Licence L7750/2001/10. A pre-application scoping meeting was held with Tim Moran and Fiona Sharpe on 23 July 2024 to confirm this approach and a further scoping meeting was held on Tuesday 12th August with Fiona Sharpe and Robyn Buder. Construction and operations of the Mungari TSF will also be completed in line with approvals under the *Mining Act 1978*. The geotechnical parameters of the upstream lift design are currently under assessment by DMPE (Application ID 500639).

Annual audits of the operational performance of the Mungari TSF have been undertaken by the Engineer of Record, Knight Piesold, as part of tenement reporting requirements. In addition to the annual audits, Evolution has conducted due diligence to support this application, including a further review by Knight Piesold of the required operating parameters for tailings deposition into the existing TSF, with no geotechnical or environmental management concerns identified.

Table 1 Summary of Assessed and Approved Activities Under Current *Environmental Protection Act 1986* Instruments

Infrastructure	Instrument	Assessed & authorised activities	Status
Mungari TSF - Cells 3 and 4	W6364/2020/1	Cat 5 (2.5 Mtpa) – staged CCI construction and time limited operations of TSF Cells 3 and 4	- Construction completed up to Stage 3 - Operating Cell 4 Stage 3 under Time Limited Operations - TLO period ceases on 4 June 2026 - Licence amendment required for TSF Cell 4 Stage 3 operations - Licence amendment required for TSF Cells 3 and 4 Stages 4 to 10 construction and operations
Mungari Processing Plant Expansion	W6803/2023/1	Cat 5 (5 Mtpa) – Construction, commissioning and time limited operation of expanded processing plant	- Construction complete - Operating under Time Limited Operations - TLO period ceases on 21 September 2025 - Licence amendment required for operations
Cutters Ridge In-pit TSF	W6862/2023/1	Cat 5 (2.5) Mtpa – Construction and time limited operation of Cutters Ridge In-pit TSF infrastructure	- Construction complete - Operating under Time Limited Operations - TLO period ceases on 19 September 2025 - Licence amendment required for operations
Mungari Processing Plant and TSF Cells 1-4	L7750/2001/10	Cat 5 (5 Mtpa) – operation and maintenance of processing plant and TSF Cells 1-4	- Mungari processing plant currently operating - TSF Cells 1 & 2 available for deposition (not currently being deposited into) - TSF Cell 3 & 4 Stage 2 deposition complete

Premises Details

Evolution's Mungari Gold Operations is a gold mining and processing operation located 20 km west of Kalgoorlie-Boulder in Western Australia. Current operational projects within the Mungari Gold Operations include the Mungari Gold Project (L7750/2001/10), Carbine/Paradigm Project Area (L9099/2017/1) and Kundana Gold Mine (L9190/2019/2).

Evolution's Mungari Gold Project, including the existing processing infrastructure, currently operates under Licence L7750/2001/10 with DWER. Licence L7750/2001/10 permits the processing and beneficiation of ore (Cat 5), mine dewatering (Cat 6), screening of material (Cat 12) and putrescible landfill (Cat 86). The L7750/2001/10 premises partially covers mining tenements M15/829, M15/830, M15/1751, M15/1408, M151287, M15/688, L15/228, L15/246, L15/227 and M15/1407.

The existing, approved Mungari processing plant and TSF Cells 1 and 2 began construction in 2014 under Works Approvals W5353/2013/1 and W5464/2013/1 respectively. The construction of Mungari TSF Cells 3 and 4 located adjacent to the western side of existing Cell 2 occurs under Works Approval W6364/2020/1 with subsequent licence amendments for staged lifts. The Mungari processing plant currently has an approved design capacity of 5 million tonnes per annum (Mtpa) and has recently undergone an expansion under approved Works Approval W6803/2023/1. No other changes to approved operations are proposed.

All ore produced from Mungari Gold Operations is processed through the Mungari processing plant and tailings are deposited into the Mungari and Cutters Ridge TSFs. This proposed Licence amendment will facilitate the processing and tailings storage for the constructed and operating expanded infrastructure.

Table 2 is a summary of previously submitted compliance documents for the Licences and Works Approvals demonstrating that the premises has met construction and operational specifications and ongoing review of compliance with conditions. Evolution requests that The Department applies the findings of the compliance document assessments in its Licence decision.

Table 2 Previously Submitted Compliance Documents

Submission Date	Document	Instrument
23 March 2025	Environmental Compliance Report Cutters Ridge In-Pit TSF	W6862/2023/1
25 March 2025	Environmental Compliance Report Mungari 4.2 Processing Plant Expansion	W6803/2023/1
26 March 2025	Annual Environmental Report Mungari Gold Operations	L7750/2001/10
26 March 2025	Annual Audit Compliance Report Mungari Gold Operations	L7750/2001/10
05 June 2025	Critical Containment Infrastructure Report TSF Cell 4 Stage 3	W6364/2020/1
04 July 2025	Time Limited Operations Compliance Report TSF Cell 3 Stage 3	W6364/2020/1

Prescribed Premises Category

The proposed amendment to Licence L7750/2001/10 seeks authorisation to continue operations of the constructed Mungari Processing Plant expansion, Cutters Ridge In-Pit TSF, and TSF Cell 4 Stage 3 to facilitate mineral ore processing at the approved throughput of up to 5,000,000 tonnes per annual period. This Licence amendment also includes the construction and operation of TSF Cell 3 and 4 Stages 4 to 10 embankment raises. The L7750/2001/10 Premises Boundary has been amended to include the Cutters Ridge In-Pit TSF (**Figure 1**). No other changes to the activities are proposed as part of this application.

The proposed amendment relates to Category 5: Processing or beneficiation of metallic or non-metallic ore only (**Table 3**). No increase to L7750/2001/10 Category 5: Processing or beneficiation of metallic or non-metallic ore production capacity to 5,000,000 tonnes per year is required to operate the expanded processing infrastructure. The planned annual throughput from the constructed and operating Mungari processing plant expansion is approximately 4,200,000 tonnes, with an assessed design capacity of 5,000,000 tonnes per year.

Table 3 L7750/2001/10 – Current Category Details

Prescribed premises category description (Schedule 1, <i>Environmental Protection Regulations 1987</i>)	Assessed production / design capacity
Category 5: Processing or beneficiation of metallic or non-metallic ore: premises on which: (a) Metallic or non-metallic ore is crushed, ground, milled or otherwise processed; or (b) Tailings from metallic or non-metallic ore are reprocessed; or (c) Tailings ore residue from metallic or non-metallic ore are discharged into a containment cell or dam.	5,000,000 tonnes per annual period
Category 6: Mine dewatering: premises on which water is extracted and discharged into the environment to allow mining of ore.	5,000,000 tonnes per annual period
Category 12: Screening etc. of material: premises (other than premises within category 5 or 8) on which material extracted from the ground is screened, washed, crushed, ground, milled, sized or separated.	500,000 tonnes per annual period
Category 89: Putrescible landfill site: premises on which waste (as determined by reference to the waste type set out in the document entitled "Landfill Waste Classification and Waste Definitions 1996" published by the Chief Executive Officer, as amended from time to time) is accepted for burial.	2,000 tonnes per annual period

Activity Details

Tailings produced at the processing plant is distributed between the existing Mungari TSF Cells 1 and 2 (constructed under Works Approval W5464/2013/1), Cells 3 and 4 (constructed under Works Approval W6364/2020/1) and the Cutters Ridge In-Pit TSF (constructed under Works Approval W6364/2020/1). The expected tailings output for the Mungari Mill is between 4.2 and 5.0 Mtpa. The Mungari TSF Cells and Cutters Ridge TSF can accept up to 2.5 Mtpa each and will have a deposition rate of 2.1 to 2.5 Mtpa, with the combined facilities being able to accept the expected output of tailings once all approvals are in place. Assuming 4.2 Mtpa of tailings generation from 1 May 2025, the estimated remaining capacity for the life of the TSFs are shown in Table 4.

Tailings is transported to the TSFs from the Mungari Mill by a steel and/or HDPE delivery pipelines which run within the existing containment ditch of the along existing hauls roads. These pipelines join existing tailings distribution pipelines, which extend around the perimeter of the TSF Cells. HDPE spigot offtakes are installed at intervals along the Cells. Valves are connected to each offtake, allowing for the deposition location to be controlled. The deposition location is variable throughout each stage, allowing for even distribution of tailings throughout the Cell.

Tailings deposition results in the formation of supernatant ponds in each Cell comprised of process water, which is maintained by interchanging the deposition location where necessary. Tailings moisture content is managed via the decant and return water system, which pumps water collected to the Mungari Mill via the existing decant return water pipeline.

The existing TSF tailings pipeline corridors are displayed in Figure 6. The tailings and decant return pipelines are located wholly within the existing pipeline corridors. The pipelines are placed in an earthen v-drain with sufficient capacity to contain spillage in the event of a pipeline failure. Scour pits are situated at appropriate intervals and low points that are sufficient to contain the volumes of the pipeline. Air release valves are positioned at relevant high points. Flow meters and breathers are installed at appropriate locations along the pipelines.

Under existing, approved operating procedures, the following activities ensure continued compliance to current Licence conditions and will maintain a high standard of environmental and geotechnical management practices during processing activities:

- Bund and sump maintenance and upgrades when required;
- Daily pipeline inspections;
- Dust suppression used on haul roads and, as applicable, access tracks;
- Pipelines constructed where possible adjacent to roads to allow inspection visibility;
- Service and maintenance of pumps, breathers, isolation valves and flow meters; and
- Relevant site training and induction of all personnel working in the area.

HDPE piping installed at the Mungari Gold Project meet the following Standards:

- AS/NZS 2033:2008: Installation of polyethylene pipe systems;
- AS/NZS 4129:2008 Fittings for polyethylene (PE) pipes for pressure applications;
- AS/NZS 4130:2009 Polyethylene (PE) pipes for pressure applications; and
- AS/NZS 4131:2010 Polyethylene (PE) compounds for pressure pipes and fittings

The TSF is a paddock arrangement and rainfall onto the facility is managed through the water management plan (water balance) and appropriate freeboard allowances. There are no inflows from external catchments that report to the TSF basin. For this site, surface water management comprises management of run-off reporting to the toe of the facility in order to prevent ponding and/or erosion of the embankments.

Surface water catchment areas that currently report to Cell 1 and Cell 2 are directed into shallow surface drains located downstream of the north embankments. As part of the Cell 3 and Cell 4 design, a run-off collection trench was constructed along the downstream toe of Cell 3 and Cell 4. This flows into sedimentation basins west of Cell 4 and south east of Cell 3.

Groundwater in the area is reflective of regional hypersalinity, with the value of total dissolved solids (TDS) ranging from 50,000 mg/L to 100,000 mg/L. The pH is neutral, typically ranging from 5 to 8. These harsh parameters result in no environmental values of the groundwater and little to no beneficial uses. Paired groundwater monitoring bores are installed downstream of the Mungari TSF Cells 1 and 2 (TSF-MB-02 – TSF-MB-06), Mungari TSF Cells 3 and 4 (TSF-MB-08 – TSF-MB-15) and Cutters Ridge in-pit TSF (CR-MB-01 – CR-MB-06) to allow for data gathering to

detect changes in groundwater level and quality. Each bore station comprises paired deep and shallow bores. Shallow bores will detect any seepage from the TSF within the subsurface zone in addition to any changes in groundwater level. Deep bores will indicate any changes in chemical composition. The locations of the existing monitoring bores are illustrated in **Figure 3**.

Figure 8 to Figure 13 in Appendix 1 show monthly groundwater monitoring results for the TSF (July 2024 – July 2025) and Cutters Ridge (CR) monitoring bores (January 2025 – July 2025). It is noted that the October 2024 monitoring data for the TSF deviates from the rest of the year, likely due to equipment calibration issues. Similar inconsistencies were observed in May 2025, where some results also deviated from the overall trend. Monitoring data from subsequent months returned to expected levels. Additionally, TSF-MB-15 deep was not sampled in December due to an oversight in the field. This was addressed, and the monitoring field sheet was updated going forward. Monitoring data for CR monitoring bores remained relatively consistent with only minor fluctuations.

Monitoring of Total Cyanide (CN) and Weak Acid Dissociable (WAD) Cyanide was conducted on a quarterly basis, with samples taken at least 45 days apart as per the Operating Licence, to monitor any mobilisation of cyanide from the TSF. The Operating Licence specifies a limit of 0.5 mg/L of WAD CN, with all exceedances to be reported to DWER. A detection limit of 0.04 mg/L for WAD CN and Total CN applies to the laboratory analysis techniques. Throughout the reporting period, WAD CN and Total CN remained below the licence limit (**Table 5**). Annual monitoring results are displayed in **Table 6**.

Table 4 Estimated Capacity for TSFs

Financial Year	Remaining Storage Capacity at End of FY (Mt)*		
	Mungari TSF Cells 1 & 2	Mungari TSF Cells 3 & 4	Cutters Ridge TSF
FY26	0.0	15.0	6.2
FY27	0.0	12.9	4.1
FY28	0.0	10.8	2.0
FY29	0.0	8.6	0.0

*Assuming 4.2 Mtpa of tailings generation

Table 5 Quarterly Monitoring Results for TSF and Cutters Ridge Monitoring Bores

Quarter	Total Cyanide (mg/L)	WAD Cyanide (mg/L)
2024 Q2	<0.040	<0.040
2024 Q3	<0.040	<0.040
2024 Q4	<0.040	<0.040
2025 Q1	<0.040	<0.040
2025 Q2	<0.040	<0.040
2025 Q3	<0.040	<0.040
2025 Q4	<0.040	<0.040

Table 6 Annual Monitoring Results for TSF Monitoring Bores (13 and 14 November 2024)

Sample Point	TSF-MB-08 Deep	TSF-MB-09 Deep	TSF-MB-10 Deep	TSF-MB-11 Deep	TSF-MB-12 Deep	TSF-MB-13 Deep	TSF-MB-14 Deep	TSF-MB-15 Deep	CR-MB-01 Deep	CR-MB-02 Deep	CR-MB-03 Deep	CR-MB-04 Deep	CR-MB-06 Deep
Aluminium (mg/L)	0.23	0.29	<0.10	1.88	0.21	<0.21	<0.21	<0.21	34.3	4.14	0.96	1.88	2.74
Arsenic (mg/L)	<0.021	<0.010	<0.010	<0.021	<0.021	<0.021	<0.021	<0.021	<0.010	<0.010	<0.005	0.001	<0.010
Bicarbonate Alkalinity (mg/L)	72	68	9	39	64	79	50	81	<1	54	615	510	456
Cadmium (mg/L)	<0.0021	<0.0010	<0.0010	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021	0.0014	0.0048	<0.0005	0.0002	<0.0010
Calcium (mg/L)	660	362	1000	749	581	445	739	1240	847	776	1510	910	1610
Carbonate (mg/L)	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloride (mg/L)	43600	32200	35900	44400	49800	49400	51100	54000	24100	23700	18500	3440	22100
Chromium (mg/L)	<0.021	<0.010	<0.010	<0.021	<0.021	<0.021	<0.021	<0.021	0.025	<0.010	<0.005	0.003	<0.010
Cobalt (mg/L)	<0.021	<0.010	0.013	<0.021	0.05	<0.021	<0.021	<0.021	0.102	0.528	0.056	0.003	<0.010
Copper (mg/L)	<0.021	0.021	0.016	<0.021	<0.021	<0.021	<0.021	<0.021	0.03	0.211	0.009	0.005	0.021
Electrical Conductivity (µS/cm)	114000	87900	98600	116000	128000	127000	128000	138000	68900	67500	53000	12300	64600
Iron (mg/L)	<1.05	<0.52	<0.52	1.64	<1.05	<1.05	<1.05	2.13	38.3	5.16	7.69	2.92	6.38
Lead (mg/L)	<0.021	<0.010	<0.010	<0.021	<0.021	<0.021	<0.021	<0.021	<0.010	<0.010	<0.005	<0.001	<0.010
Magnesium (mg/L)	4780	3340	3640	4840	5720	6230	6470	4780	2570	2450	837	287	2150
Manganese (mg/L)	1.98	0.5	0.633	0.66	2.9	1.87	3.85	6.4	3.82	21.6	29.7	0.342	1.31
Nickel (mg/L)	0.192	<0.010	0.063	0.026	0.048	0.037	0.029	<0.021	0.197	0.304	0.036	0.007	0.014
pH (pH units)	5.98	7.39	5.94	6.5	6.9	6.89	6.66	6.73	4.01	5.95	7.36	7.46	7.25
Potassium (mg/L)	186	159	207	175	177	191	207	254	199	255	180	30	88
Selenium (mg/L)	<0.21	<0.10	<0.10	<0.21	<0.21	<0.21	<0.21	<0.21	<0.10	<0.10	<0.05	<0.01	<0.10
Sodium (mg/L)	28700	19800	22800	28700	30500	31700	32700	36100	13900	14100	11200	1250	12200
Sulphate (mg/L)	7850	5410	7250	8040	10100	10300	11700	7110	3780	4520	3380	669	4260
Total Cyanide (mg/L)	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.004	<0.004	<0.040
Total Dissolved Solids (mg/L)	95200	69200	81200	100000	121000	109000	113000	115000	48700	48900	35200	9100	45400
WAD Cyanide (mg/L)	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.004	<0.004	<0.040
Zinc (mg/L)	0.131	<0.052	0.077	<0.105	<0.105	<0.105	<0.105	<0.105	0.498	0.927	<0.026	0.01	<0.052

Implementation Strategy

Pending project approval, the proposed schedule for construction and operations of the TSF lifts stage 4 to 10 is provided in Table 7. Once approvals are in place it is important that TSF Cell 3 Stage 4 construction works commences in September 2025 to enable continued operation of the expanded processing plant. The proposed works are planned to finish in February 2026. The following TSF Detailed Design Reports have been provided as Attachment 3B:

- *Mungari TSF Cells 3 & 4 Stages 1-10*
- *Mungari TSF Cells 3 & 4 Stages 4-10 addendum*

The *TSF Cell 3 and 4 Stage 4 to 10 Design Report (addendum)* outlines the proposed design modifications to support ongoing tailings storage at the Mungari Gold Project. The changes to this facility are intended to facilitate tailings deposition of approximately 25 Mt over a 10-year mine life which remains the same as the original design intent. The main design enhancement is the use of tailings material – rather than solely borrow material – for partial construction of the embankments. This approach follows successful suitability testing of the tails material, confirming their appropriateness for use in embankment construction. It is important to note that tailings deposition will be split between the approved Cutters Ridge in-pit TSF and the existing, approved TSF Cells 1 to 4, enabling Mungari's increased overall production rate of up to 5 Mtpa. The updated TSF design includes previously approved upstream raises for Stages 4 through 10 of the existing Cell 3 and 4 with an unchanged outer footprint of 133 hectares. Cells 3 and 4 are situated west of Cells 1 and 2 and comprise two rectangular paddock-style cells, which are operated independently until their storage capacity is reached. The facility features a multi-zoned perimeter embankment, which includes:

- An initial starter embankment (Stage 1, completed),
- One downstream lift (Stage 2, completed),
- One centreline lift (Stage 3, completed), and
- Four upstream lifts (Stage 4, Stage 5/6, Stage 7/8, and Stage 9/10) partially constructed of tailings material, which are being submitted for approval through this document.

As per the original, approved Cell 3 & 4 design, deposition of tailings is designed such that the ponds are maintained in the centre of each cell around a centralised decant tower. Access to the decant towers is from causeways extending to the centre of each cell. Supernatant water is removed from the TSF via submersible pumps located within the decant towers. Supernatant water is pumped back to the plant for re-use in the process circuits. The design incorporates an existing central basin underdrainage system (network of finger drains, collector drains and toe drains) over the entire TSF basin to reduce seepage, increase tailings densities, and improve the geotechnical stability of the facility. Each system gravity feeds to sumps located at the base of abstraction infrastructure, for water removal to reduce the pressure head on the facility. These management measures remain the same as the original, approved design.

The tailings deposition strategy for TSF 3 and 4 was designed and will be managed throughout the life of the facility to meet the following objectives:

- Deposition of a basin lining within the inundation area;
- Deposition to effectively utilise the net available storage capacity;
- Discharge to improve sub-aerial deposition and consolidation of tailings;
- Effective management of the size and location of the supernatant pond;
- Facilitate the implementation of the storage closure strategy;
- Maintenance of freeboard against the upstream embankment face;
- Reduce down time by providing operational flexibility;
- Reduce potential for dust generation;
- Reduce the operating costs of the tailings distribution system; and
- Reduce the volume of water stored on the facility at any time.

The facility design and proposed deposition process is based on laboratory test data and a number of assumptions. In addition, the properties of the tailings will vary as different source rocks are used and the processing operation is refined. As such the design includes for flexibility to enable changes to be made to the TSF to suit the characteristics of the tailings.

Continual monitoring of the location of the decant pond will be undertaken during operation of the TSF. Whilst the deposition sequence will be planned in a cyclic manner around the facility, if the pond starts to move away from the decant location then deposition will need to be adjusted to push the pond back to its correct location.

There will be multiple discharge points around the facility to allow control of beach development and pond location. Since the embankments will be constructed in stages, the performance of the tailings will be monitored to allow the timing of future embankment stages to be modified to suit the measured performance of the tailings in the storage facility.

Prevention of erosion of the TSF embankment toe by surface flows during rainfall events is achieved through the use of protective engineered fill material. Coarse mine waste material shall form the downstream component of the embankment through a buttress and provides adequate erosion protection. The downstream embankment face shall also comprise erosion protection, placed during Stage 5/6 to Stage 9/10. In addition, there will be regular monitoring of the TSF embankments and maintenance undertaken as necessary to ensure safe operation of the facility.

To ensure continuing environmental management and compliance in line with TSF construction requirements, Evolution will submit a Critical Containment Infrastructure Report to DWER following each TSF lift. Evolution proposes to enter the operations phase once the constructed TSF lifts are in place, and where DWER has notified Evolution that the Critical Containment Infrastructure Report meets the requirements of the Licence conditions. This is to ensure existing processing operations can continue, and production rates through the expanded processing plant are not impacted, whilst reducing regulatory duplication and administrative burden to the Department. A pre-application scoping meeting was held with Tim Moran and Fiona Sharpe on 23 July 2024 to confirm this approach and a further scoping meeting was held on Tuesday 12th August with Fiona Sharpe and Robyn Buder.

Based on the information above, Evolution seeks a Licence amendment to reflect the project and provide for a TSF Cells 3 and 4 Stages 4 to 10 construction and operations under the Licence to afford operational continuity. Existing Licence L7750/2001/10 authorises all prescribed activities at the Mungari TSF.

The processing infrastructure will be monitored to ensure environmental and compliance objectives are met and to maintain continuation of monitoring from current operating strategies. Monitoring will be carried out as per the Licence. The following dot points summarise the key monitoring methods and schedules:

- Annual vegetation monitoring around TSF;
- Annual water quality monitoring that includes pH, EC, TDS, cyanide and heavy metals analysis;
- Continuous monitoring of tails and water volumes deposited and recovered from the TSF;
- Daily visual pipeline checks;
- Ongoing monitoring of the supernatant pond on the TSF;
- Record the monthly flow meter readings;
- TSF monitoring bores monitored in accordance with **Table 8**; and
- Visual dust observations will be carried out regularly.

As part of due diligence undertaken, Mungari's TSF Engineer of Record, Knight Piesold, has reviewed the geotechnical and environmental management parameters for the proposed tails deposition and this technical review has indicated the TSF cells can be operated concurrently with the current controls in place. The geotechnical parameters and design of the Mungari TSF Cells 3 and 4 upstream lifts are currently under assessment by DMPE (Application ID 500639). No changes to any other associated TSF infrastructure are required (i.e. TSF embankments, existing pipelines, monitoring bores etc.).

A Time Limited Operations Compliance Report will be submitted within 30 calendar days of the amended Licence 7750/2001/10 being granted.

Table 7 Indicative TSF Cell 3 Stage 4 Schedule

Project Stage	Indicative Schedule
Construction	September 2025 – February 2026
Commissioning	February 2026 - May 2026
Operation	May 2026 – November 2026

Table 8 Proposed L7750/2001/10 Monitoring Program

Monitoring Point Reference	Parameter	Units	Frequency
Inspection of Infrastructure			
Tailings pipelines	Visual integrity	NA	Daily
Return water lines	Visual integrity	NA	Daily
TSF Embankment freeboard	Visual to confirm required freeboard capacity is available	NA	Daily
Process Monitoring			
Mungari processing plant	Ore throughput	tonnes	Continuous
TSF	Volumes of tailings deposited into each cell of the TSF	m ³	Continuous
TSF	Volumes of water recovered from each cell of the TSF	m ³	Continuous
Monitoring of Ambient Groundwater Quality			
TSF Cell 1 and TSF Cell 2 monitoring bores	Standing water level (SWL)	mbgl	Monthly
MB02	pH ¹	pH units	
MB03	Electrical conductivity ¹	-	
MB04	Total dissolved solids (TDS) ¹	mg/L	
MB05			
MB06	WAD-CN	mg/L	Quarterly
TSF Cell 3 and TSF Cell 4 monitoring bores	Total CN	mg/L	
MB08	Ca, Mg, Na, K, CO ₃ , Cl, SO ₄ , Al, As, Cd, Cr, Cu, Fe, Mn, Ni, Zn, Pb, Co	mg/L	Annually
MB09			
MB10			
MB11			
MB12			
MB13			
MB14			
MB15			
Cutters Ridge In-Pit TSF monitoring bores			
MB01			
MB02			
MB03			
MB04			
MB05			
MB06			
As depicted in Figure 3, Schedule 1: Maps			

Note 1: pH, TDS and EC are permitted to be measured in the field in accordance with Australian Standard 5667

Other Approvals

Operating Licence L7750/2001/10 is currently active over the Mungari area, permitting the processing and beneficiation of ore, mine dewatering, screening of material and putrescible landfill. This proposed Licence amendment will facilitate the continued processing operations for the constructed expansion.

A pre-application scoping meeting with Tim Moran and Fiona Sharpe of DWER regarding this application was conducted on 23 July 2024 and a further scoping meeting was held on Tuesday 12th August with Fiona Sharpe and Robyn Buder. This application is in line with currently authorised activities is deemed a low risk and it is Evolution's position that an Environmental Impact Assessment and referral to Office of Environmental Protection Authority (EPA) is not required. No vegetation clearing will be required to facilitate the amendment.

Evolution have approved Mining Proposals under the *Mining Act 1978* for the existing activities. The geotechnical parameters and design of the Mungari TSF Cells 3 and 4 upstream lifts are currently under assessment by DMPE (Application ID 500639). The existing Mungari Processing Plant and TSFs are approved and constructed. Operation of the Mungari Processing Plant and TSFs will continue in line with current approvals under the *Mining Act 1978*. No changes to approved TSF operations will result from this Licence amendment application.

Evolution acknowledges its responsibility for ensuring appropriate engagement and protection of heritage and confirms this has taken place in accordance with *Aboriginal Heritage Act 1972 requirements*. The processing infrastructure does not interact with any Aboriginal Sites or Heritage places under the *Aboriginal Heritage Act 1972*. Therefore, no approvals under the *Aboriginal Heritage Act 1972* are required.

Receptors

It should be noted that all receptors have been considered, assessed and approved under works approvals and previous licence amendments but are included here for completeness.

The project is not within proximity to any conservation reserves or parks. The nearest conservation reserve is the Kurrawang Nature Reserve which is situated approximately 10 km southeast of the Mungari Gold Project. Rowles Lagoon Class C Conservation Park, is situated on the former Credo pastoral station, located 50 km to the northwest, along with the Clear and Muddy Lakes Class C Nature Reserve (Figure 7). Given the distance of these receptors from the premises, they should not be considered as receptors under the scope of DWER's assessment.

The Project is located >2 km west of the regional chain of salt lakes which includes Black Flag Lake, White Flag Lake and Lake Kopai. Given the distance of these receptors from the premises, they should not be considered as receptors under the scope of DWER's assessment.

There are no other groundwater users within 10 km of the Project. The groundwater in the region is hypersaline, therefore there are very limited beneficial uses other than for mineral processing and dust suppression. The underlying groundwater is not considered a sensitive receptor.

The Mungari Gold Project is located on the Mount Burges pastoral lease which supports the grazing of cattle and other pastoral activities. Evolution maintains good relationships with the station owners to ensure information and intentions are shared and transparent communications. The nearest residential community is the Kurrawang Community, located approximately 15 km southeast of the Mungari Gold Project, followed by the Township of Coolgardie, located approximately 20 km to the south. Given the distance of these receptors from the premises, they should not be considered as receptors under the scope of DWER's assessment.

Table 9 provides a summary of potential environmental and human receptors that may be impacted as a result of activities upon or emission and discharges from the prescribed activities.

Table 9 Receptors and Distance from Mungari Gold Project

Type / Classification	Description	Distance + Direction	Proposed Controls
Environmentally Sensitive Areas	Rowles Lagoon Nature Reserve and Clear and Muddy Lakes Nature Reserve	50 km northwest	Given the distance of this receptor from the Premises, it should not be considered a receptor under the scope of DWER's assessment.
Threatened Ecological Communities	No TECs or PECs have been recorded within, or in proximity to the Premises.	NA	NA
Threatened and/or priority fauna	No Threatened or Priority fauna species have been recorded within, or in proximity to the Premises, including no evidence of Malleefowl nesting mounds or other activity	NA	NA – Processing infrastructure is located within existing cleared areas. No additional clearing proposed.
Threatened and/or priority flora	No Threatened or Priority flora species have been recorded within the project area.	NA	NA - Processing infrastructure is located within existing cleared areas. No additional clearing proposed.
Aboriginal and other heritage sites	No Aboriginal and other heritage sites have been recorded within the project area.	NA	NA - Processing infrastructure is located within existing cleared areas. No additional clearing proposed.
Public drinking water source areas	No public drinking water source areas within, or in proximity to the Premises.	NA	NA
Rivers, lakes, oceans, and other bodies of surface water, etc. (ephemeral salt lakes)	Ephemeral salt lakes	>2 km	NA
Acid sulfate soils	No acid sulfate soils have been recorded within, or in proximity to the Premises.	NA	NA
Underlying groundwater Other groundwater users	~35 m depth	Underlying groundwater	Underlying groundwater is mainly saline to hypersaline (the TDS ranges from around 50,000 to 100,000 mg/L.) Monitoring program aligned with current Licence. No nearby groundwater users.
	>10 km	Other groundwater users	
Human Receptors	Mount Burges Pastoral Station	NA	Processing infrastructure is located within existing cleared areas. No additional clearing proposed. Regular consultation with pastoral managers.
	Kurrawang Community	15 km southeast	Given the distance of these receptors from the premises, they should not be considered as receptors under the scope of DWER's assessment.
	Coolgardie	20 km south	
	Kalgoorlie-Boulder	20 km east	

Risk Assessment

Evolution 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. Activities directly regulated by the *Mining Act 1978* have not been repeated in the risk assessment or proposed Licence changes of this Licence amendment application.

To identify the risks associated with the processing infrastructure, each component of the process was assessed to identify any risk that may occur within each component. **Table 10** shows DWER's risk rating matrix used when evaluating risks. Risks that were identified are detailed in **Table 11**.

From the risk identification process, three potential emissions were identified associated with the proposed the proposed tailings pipeline as listed below:

- Dust and noise (from TSF construction)
- Dust and chemical spill (from operation of processing plant)
- Tailings spill (from breach of pipeline);
- Seepage (from tailings discharge into TSF); and
- Tailings spill (from overtopping TSF).

Table 10 Risk Assessment Matrix

Likelihood	Consequence				
	Slight	Minor	Moderate	Major	Severe
Almost certain	Medium	High	High	Extreme	Extreme
Likely	Medium	Medium	High	High	Extreme
Possible	Low	Medium	Medium	High	Extreme
Unlikely	Low	Medium	Medium	Medium	High
Rare	Low	Low	Medium	Medium	High

Table 11 Risk Assessment

Risk event					Risk rating	L7750/2001/10 Licence controls sufficient?	Conditions of Licence	Justification for additional regulatory controls
Source / activities	Potential emission	Potential pathway and impact	Potential receptors	Controls				
Construction								
Construction of TSF Cell 3 and 4 Stages 4 to 10	Dust	Air/windborne pathway	Native vegetation	• Water cart retained onsite, wetting down of roads and stockpiles when required.	C = Slight L = Unlikely Low Risk	Y	NA	Conditions for the adequate management of this risk already exist on the Licence. No additional regulatory controls are required. New conditions required to authorise construction of stages 4 to 10 embankment raises.
	Noise	Air/windborne pathway	NA	• <i>Environmental Protection (Noise) Regulations 1997</i> apply.	C = Slight L = Unlikely Low Risk	Y	NA	
Operation								
Operation of Mungari Processing Plant (including expansion)	Dust	Air/windborne pathway	Native vegetation	• Water cart retained onsite, wetting down of roads and stockpiles when required.	C = Slight L = Unlikely Low Risk	Y	NA	Sufficient measures in place to control the impacts of dust and chemicals associated with the operations on sensitive receptors. No additional regulatory controls are required.
	Chemicals	Spills, leaks discharges causing groundwater or soil contamination issues.	Native vegetation Groundwater	• In the event of a chemical spill: ○ The source will be stopped immediately and the spill will be contained with additional bunding from the spill kit that will be in the vicinity; ○ Any contaminated soil will be removed and disposed of appropriately by the service crew; ○ Soil and water sampling will be carried out by the Mungari Environment Department to assess the extent of the contamination. Incident reports will be provided in accordance with Section 72 of the <i>Environmental Protection Act 1986</i>; • A Spill Management Procedure exists onsite; • Chemicals and reagents stored in areas with a holding capacity of 110%; • All chemicals and reagents storage areas are required to have spill kits and all chemicals are required to be correctly labelled. Monitoring and housekeeping is carried out regularly; • Pumps and pipelines are inspected and serviced regularly; • Chemical management is included in inductions, training and awareness onsite; • Chemicals may be disposed of offsite by an external provider; • Significant chemical spills leading to environmental harm are reported to relevant authorities within one business day; and • Trained Emergency Response Team onsite.	C = Slight L = Unlikely Low Risk	Y	NA	

Risk event					Risk rating	L7750/2001/10 Licence controls sufficient?	Conditions of Licence	Justification for additional regulatory controls
Source / activities	Potential emission	Potential pathway and impact	Potential receptors	Controls				
Operation of tailings pipelines (Mungari Processing Plant to Mungari TSF and Cutters Ridge In-Pit TSF)	Tailings spill potentially containing concentrations of elements with environmental significance	Unplanned direct discharge of tailings into the environment. Reduced vegetation health, and potential loss of vegetation.	Surrounding native vegetation. No TECs or PECs have been recorded in the Premises and none are located within 2 km of the premises. No significant fauna or conservation significant vertebrate fauna have been detected in the Premises and none are located within 2 km of the premises.	- All pipelines containing tailings are either equipped with automatic cut-outs in the event of a pipe failure or provided with secondary containment sufficient to contain any spill for a period equal to the time between routine inspections. - Flow meters on tailings lines. - HDPE dams and pipelines meet required standards. - In the event of a spill, the Spill Management Procedure will be followed. - Minimum daily inspections of pipeline integrity. - Operations managed in accordance with TSF Operating Manual. - The requirements of government approvals including Works Approvals, Operating Licences and Mining Proposals are followed.	C = Moderate L = Unlikely Medium Risk	Y	Condition 1. – The Licence Holder must ensure that all pipelines containing tailings, decant recovery, process water or mine dewater are either: (a) equipped with telemetry with leak detect alarms; and/or (b) equipped with automatic cut-outs in the event of a pipe failure; and/or (c) provided with secondary containment sufficient to contain any spill for a period equal to the time between routine inspections. Condition 6 – The Licence Holder must: (a) undertake inspections as detailed in Table 2; (b) where any inspection identifies that an appropriate level of environmental protection is not being maintained, take corrective action to mitigate adverse environmental consequences as soon as practicable; and (c) maintain a record of all inspections undertaken. Condition 21 – The Licence Holder must undertake the process monitoring in Table 9 according to the specifications in that table.	Conditions for the adequate management of this risk already exist on the Licence. No additional regulatory controls are required.
Tailings discharge into TSFs (Mungari TSF and Cutters Ridge In-Pit TSF)	Supernatant water potentially containing concentrations of elements with environmental significance	Seepage through base of the TSF. Reduced groundwater quality	Underlying groundwater	- Daily inspection of TSF and decant system. - Groundwater in the area is hypersaline (between approximately 30,000 – 120,000 mg/L TDS) with no beneficial users. - Groundwater monitoring bores. - Low permeability TSF base. - Monitoring program (Table 8) is followed. - Seepage modelling. - Supernatant water pond maintained at lowest level reasonably practical via pumping back to the Mungari Mill. - The TSF perimeter inspected on a daily basis for any signs of seepage as a requirement of the TSF Maintenance Program. - There are no GDEs within the area and there is an extremely low likelihood of the presence of subterranean fauna due to the hypersaline nature of the local groundwater, in addition to unsuitable geological habitat. - Vegetation monitoring at the TSF vicinity is carried out to identify any seepage risks.	C = Slight L = Unlikely Low Risk	N	Condition 3 – The Licence Holder must ensure that tailings are only discharged into containment cells with the relevant infrastructure requirements and at the locations specified in Table 1. Condition 5 – The Licence Holder must manage TSF cells such that: (a) the supernatant pond on each cell of the TSF is minimised as far as practicable; and (b) a seepage collection and recovery system will be implemented should seepage occur. Condition 7 – The Licence Holder must undertake a single annual water balance for the TSF, including each TSF cell. The water balance shall as a minimum consider the following: (a) regional rainfall; (b) evaporation; (c) decant water recovery volumes; (d) seepage recovery volumes; and (e) volumes of tailings (tonnages) deposited. Condition 22 – The Licence Holder must undertake the ambient groundwater monitoring in Table 10 according to the specifications in that table and record and investigate results that do not meet any limit specified. Condition 23 – The Licence Holder must undertake an annual assessment of vegetation within the zone of influence of the TSF. The assessment must: (a) photograph and record the presence and condition of key vegetation features within the zone of influence; (b) compare the results of the assessment against previous years assessments and identify whether any deterioration in the presence and/or quality of vegetation has taken place; and	Conditions for the adequate management of this risk already exist on the Licence. Additional regulatory controls are required for Cutters Ridge In-Pit TSF. Condition 3 Table 1 requires updating to include Cutters Ridge In-Pit TSF as containment infrastructure. Condition 22 Table 10 requires updating to include Cutters Ridge In-Pit TSF monitoring bores. Figure 3 and Figure 6 require updating to include Cutters Ridge In-Pit TSF and associated infrastructure.

Risk event					Risk rating	L7750/2001/10 Licence controls sufficient?	Conditions of Licence	Justification for additional regulatory controls
Source / activities	Potential emission	Potential pathway and impact	Potential receptors	Controls				
							(c) be undertaken by a person qualified in vegetation identification and sampling.	
Overtopping of TSFs due to insufficient freeboard capacity (Mungari TSF and Cutters Ridge In-Pit TSF)	Tailings spill potentially containing concentrations of elements with environmental significance	Unplanned direct discharge of tailings into the environment. Reduced vegetation health, and potential loss of vegetation.	Surrounding native vegetation. No TECs or PECs have been recorded in the premises and none are located within 2 km of the premises. No significant fauna or conservation significant vertebrate fauna have been detected in the premises, and none are located within 2 km of the premises.	• A freeboard limit is maintained in TSFs to prevent overtopping and account for the risk of high rainfall / flood events. • Ability to decrease deposition flowrate by increasing flowrate to other TSF Cells or Cutters Ridge TSF. • Adherence to minimum prescribed freeboard level. • TSF Cells volume availability is known and is recorded regularly when actively discharging. • Daily visual inspection of freeboard level. • Decant water return network. • In the event of a tailings spill, the Spill Management Procedure will be followed. • Operations managed in accordance with TSF Operating Manual • Sufficient stormwater storage capacity of TSF to accommodate all design storm event including 1:100-year AEP, 72-hour storm event. • The requirements of government approvals including Works Approvals, Operating Licences and Mining Proposals are followed.	C = Moderate L = Unlikely Medium Risk	N	Condition 4 – The Licence Holder must manage containment cells in Table 1 such that: (a) a minimum total freeboard of 500mm or a 1 in 100 year/72-hour storm event (whichever is greater) is maintained; and (b) methods of operation minimise the likelihood of erosion of the embankments by wave action. Condition 8 – The Licence Holder is authorised to operate the TSF to the operating height specified in Table 3.	Conditions for the adequate management of this risk already exist on the Licence. Additional regulatory controls are required for Cutters Ridge In-Pit TSF. Condition 3 Table 1 requires updating to include minimum freeboard for Cutters Ridge In-Pit TSF. Condition 8 Table 3 requires updating to include the constructed TSF Cell 4 Stage 3.

Proposed Licence Changes

Evolution proposes the following changes to L7750/2001/10 conditions in as highlighted yellow in **Table 12**. These amended conditions will allow the proposed processing infrastructure to be constructed and operated while using existing processing infrastructure and licensed controls for processing operations. No additional assessments or additional controls have been identified which may be relevant to the final risk assessment for the Licence amendment.



Table 12 Proposed Changes to L7750/2001/10 Conditions

No	Condition	Comment																		
3. Table 1	<table><tr><th colspan="4">Table 1: Containment infrastructure</th></tr><tr><th>Containment point reference</th><th>Containment cell or dam number(s)</th><th>Material</th><th>Infrastructure requirements</th></tr><tr><td rowspan="3">Mungari Tailings Storage Facility (Figure 3 of Schedule 1: Maps)</td><td>Mungari TSF Cell 1 and Cell 2</td><td>Tailings</td><td>Constructed to achieve a permeability of at least $<10^{-8}$ m/s or equivalent.</td></tr><tr><td>Mungari TSF Cell 3 and Cell 4</td><td>Tailings</td><td>Constructed with an in-situ compacted soil liner with a hydraulic conductivity of 5×10^{-9} m/s (95% UCL) and maximum hydraulic conductivity of 2×10^{-7} m/s.</td></tr><tr><td>Cutters Ridge In-Pit TSF</td><td>Tailings</td><td>NA</td></tr></table>	Table 1: Containment infrastructure				Containment point reference	Containment cell or dam number(s)	Material	Infrastructure requirements	Mungari Tailings Storage Facility (Figure 3 of Schedule 1: Maps)	Mungari TSF Cell 1 and Cell 2	Tailings	Constructed to achieve a permeability of at least $<10^{-8}$ m/s or equivalent.	Mungari TSF Cell 3 and Cell 4	Tailings	Constructed with an in-situ compacted soil liner with a hydraulic conductivity of 5×10^{-9} m/s (95% UCL) and maximum hydraulic conductivity of 2×10^{-7} m/s.	Cutters Ridge In-Pit TSF	Tailings	NA	Inclusion of Cutters Ridge In-Pit TSF as containment infrastructure
Table 1: Containment infrastructure																				
Containment point reference	Containment cell or dam number(s)	Material	Infrastructure requirements																	
Mungari Tailings Storage Facility (Figure 3 of Schedule 1: Maps)	Mungari TSF Cell 1 and Cell 2	Tailings	Constructed to achieve a permeability of at least $<10^{-8}$ m/s or equivalent.																	
	Mungari TSF Cell 3 and Cell 4	Tailings	Constructed with an in-situ compacted soil liner with a hydraulic conductivity of 5×10^{-9} m/s (95% UCL) and maximum hydraulic conductivity of 2×10^{-7} m/s.																	
	Cutters Ridge In-Pit TSF	Tailings	NA																	
4.	The Licence Holder must manage containment cells-infrastructure in Table 1 such that: (a) a minimum total freeboard of 500mm or a 1 in 100 year/72-hour storm event (whichever is greater) is maintained in containment cells; and (b) methods of operation minimise the likelihood of erosion of the embankments of containment cells by wave action; and (c) Maintain a minimum total freeboard of 500mm from the decant pond water level to the top of pit rim.	A minimum total freeboard of 500mm from the decant pond water level to the top of the Cutters Ridge pit rim will be maintained.																		
8. Table 3	<table><tr><th colspan="3">Table 3: Staged operating heights for the Mungari TSF</th></tr><tr><th>TSF cell</th><th>Construction height (m)</th><th>Operating height (m)</th></tr><tr><td>TSF Cell 1 (Stage 5)</td><td>360.8 mRL</td><td>360.5 mRL</td></tr><tr><td>TSF Cell 2 (Stage 5)</td><td>360.8 mRL</td><td>360.5 mRL</td></tr><tr><td>TSF Cell 3 (Stage 3)</td><td>350.7 mRL</td><td>350.4 mRL</td></tr><tr><td>TSF Cell 4 (Stage 3)</td><td>350.7 mRL</td><td>350.4 mRL</td></tr></table>	Table 3: Staged operating heights for the Mungari TSF			TSF cell	Construction height (m)	Operating height (m)	TSF Cell 1 (Stage 5)	360.8 mRL	360.5 mRL	TSF Cell 2 (Stage 5)	360.8 mRL	360.5 mRL	TSF Cell 3 (Stage 3)	350.7 mRL	350.4 mRL	TSF Cell 4 (Stage 3)	350.7 mRL	350.4 mRL	TSF Cell 4 Stage 3 has been constructed to 350.7 mRL.
Table 3: Staged operating heights for the Mungari TSF																				
TSF cell	Construction height (m)	Operating height (m)																		
TSF Cell 1 (Stage 5)	360.8 mRL	360.5 mRL																		
TSF Cell 2 (Stage 5)	360.8 mRL	360.5 mRL																		
TSF Cell 3 (Stage 3)	350.7 mRL	350.4 mRL																		
TSF Cell 4 (Stage 3)	350.7 mRL	350.4 mRL																		

No	Condition	Comment																				
New	Construction Phase A. The works approval holder is authorised to: (a) construct embankment raises for Mungari TSF Cell 3 and Cell 4 to the construction height; and (b) operate Mungari TSF Cell 3 and Cell 4 until the end of Stage 10 to the operating height, as specified in Table A Table A: Staged construction and operating heights <table><tr><th>Stages</th><th>TSF</th><th>Construction height (mRL)</th><th>Operating height (mRL)</th></tr><tr><td>4</td><td>Cell 3 and Cell 4</td><td>352.35</td><td>352.05</td></tr><tr><td>5/6</td><td>Cell 3 and Cell 4</td><td>355.75</td><td>355.45</td></tr><tr><td>7/8</td><td>Cell 3 and Cell 4</td><td>359.35</td><td>359.05</td></tr><tr><td>9/10</td><td>Cell 3 and Cell 4</td><td>363.15</td><td>362.85</td></tr></table>	Stages	TSF	Construction height (mRL)	Operating height (mRL)	4	Cell 3 and Cell 4	352.35	352.05	5/6	Cell 3 and Cell 4	355.75	355.45	7/8	Cell 3 and Cell 4	359.35	359.05	9/10	Cell 3 and Cell 4	363.15	362.85	Construction and operation of TSF Cells 3 and 4 Stages 4 to 10 embankment raises will be included onto the Licence to afford operational continuity and reduce regulatory duplication and administrative burden on the Department.
Stages	TSF	Construction height (mRL)	Operating height (mRL)																			
4	Cell 3 and Cell 4	352.35	352.05																			
5/6	Cell 3 and Cell 4	355.75	355.45																			
7/8	Cell 3 and Cell 4	359.35	359.05																			
9/10	Cell 3 and Cell 4	363.15	362.85																			
New	Compliance Reporting B. The works approval holder must within 30 calendar days of an item of Critical Containment Infrastructure identified by condition A being constructed and/or installed: (a) undertake an audit of their compliance with the requirements of condition A; and (b) prepare and submit to the CEO a Critical Containment Infrastructure Report on that compliance. C. The Critical Containment Infrastructure Report required by condition B must include as a minimum the following: (a) certification by a suitably qualified geotechnical or civil engineer that each item of critical containment infrastructure or component thereof, as specified in condition A, has been built and installed in accordance with the requirements specified in condition A; (b) as constructed plans and a detailed site plan showing the location and dimensions for each item of critical containment infrastructure or component thereof, as specified in condition A; (c) photographic evidence of the installation of the infrastructure; (d) be signed by a person authorised to represent the works approval holder and contains the printed name and position of that person;	Evolution will submit a Critical Containment Infrastructure to DWER following construction of each embankment raise.																				

No	Condition						Comment	
22.	Table 10: Monitoring of ambient groundwater quality							
Table 10	Monitoring point reference	Parameter	Units	Limit	Averaging period	Frequency	Included Cutters Ridge In-Pit TSF monitoring bores as monitoring points.	
	TSF Cell 1 and TSF Cell 2 monitoring bores MB02 MB03 MB04 MB05 MB06	Standing water level (SWL) MB02 MB04, MB06 and MB08-MB15 only except TSF-MB-05	mbgl	4	Spot Sample	Monthly		
	TSF Cell 3 and TSF Cell 4 monitoring bores MB08 MB09 MB10 MB11 MB12 MB13 MB14 MB15	Standing water level (SWL) MB05 only	mbgl	2		Monthly		
		pH ¹	pH units	-		Monthly		
		Total dissolved solids (TDS) ¹	mg/L	-		Monthly		
		Electrical conductivity (EC) ¹	-	-		Monthly		
		WAD-CN	mg/L	0.5		Quarterly		
		Total CN	mg/L	-		Quarterly		
		Ca, Mg, Na, K, CO ₃ , Cl, SO ₄ , Al, As, Cd, Cr, Cu, Fe, Mn, Ni, Zn, Pb, Co	mg/L	-		Annually		
	Cutters Ridge In-Pit TSF monitoring bores MB01 MB02 MB03 MB04 MB05 MB06							
	As depicted in Figure 3, Schedule 1: Maps							
Note 1: pH, TDS and EC are permitted to be measured in the field in accordance with Australian Standard 5667.								

No	Condition	Comment
Schedule 1: Maps	Figure 1: Premises boundary Figure 2: Dewatering discharge infrastructure, monitoring points and pathway Figure 3: TSF Cells 1, 2, 3 and 4 and Monitoring Bores MB02 – MB06 and MB08 – MB15 TSF Monitoring Bores Figure 4: Landfill trench areas Figure 5: Crushing and screening location Figure 6: Tailings pipeline from Mungari processing plant to Mungari TSF Processing Infrastructure Figure 7: Mungari TSF Tailings Pipeline Corridor Containment Capacity	Updated maps for Figures 1 to 6 have been provided with new Premises boundary displayed. Figure 3 and Figure 6 have been updated to include Cutters Ridge In-Pit TSF and associated infrastructure.



Figure 1 Premises boundary

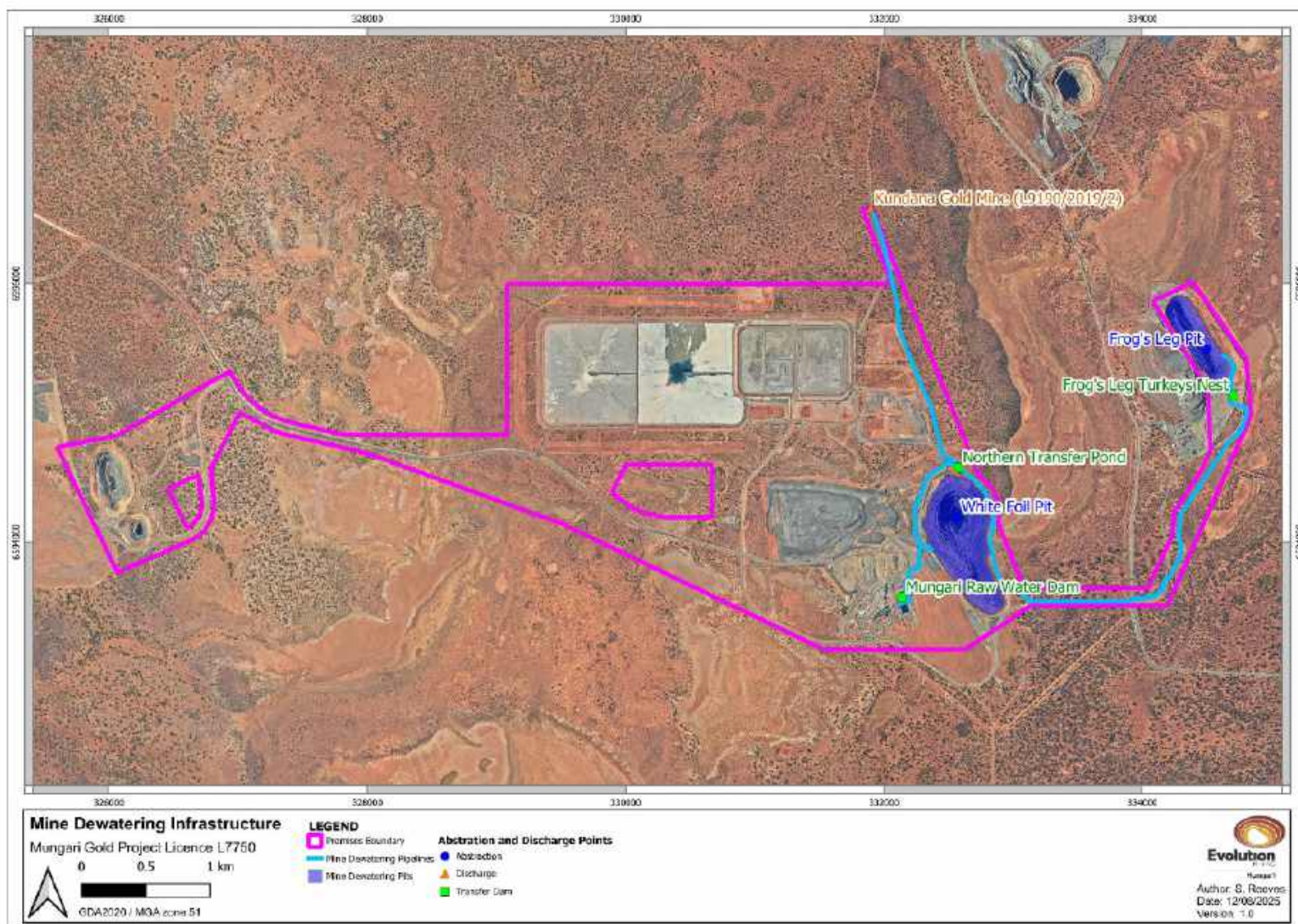


Figure 2 Dewatering discharge infrastructure, monitoring points and pathway

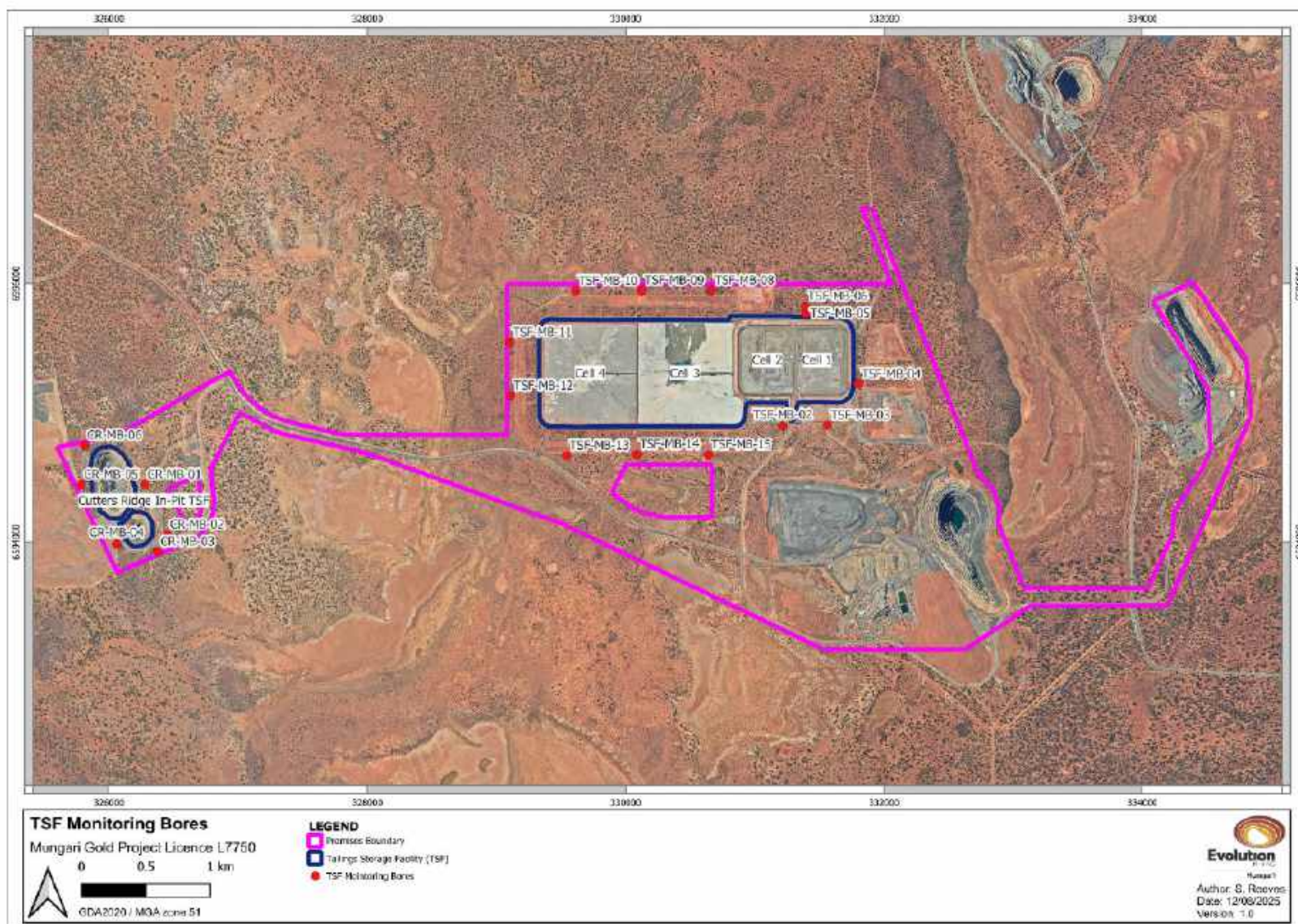


Figure 3 TSF Monitoring Bores



Figure 4 Landfill trench areas



Figure 5 Crushing and screening location

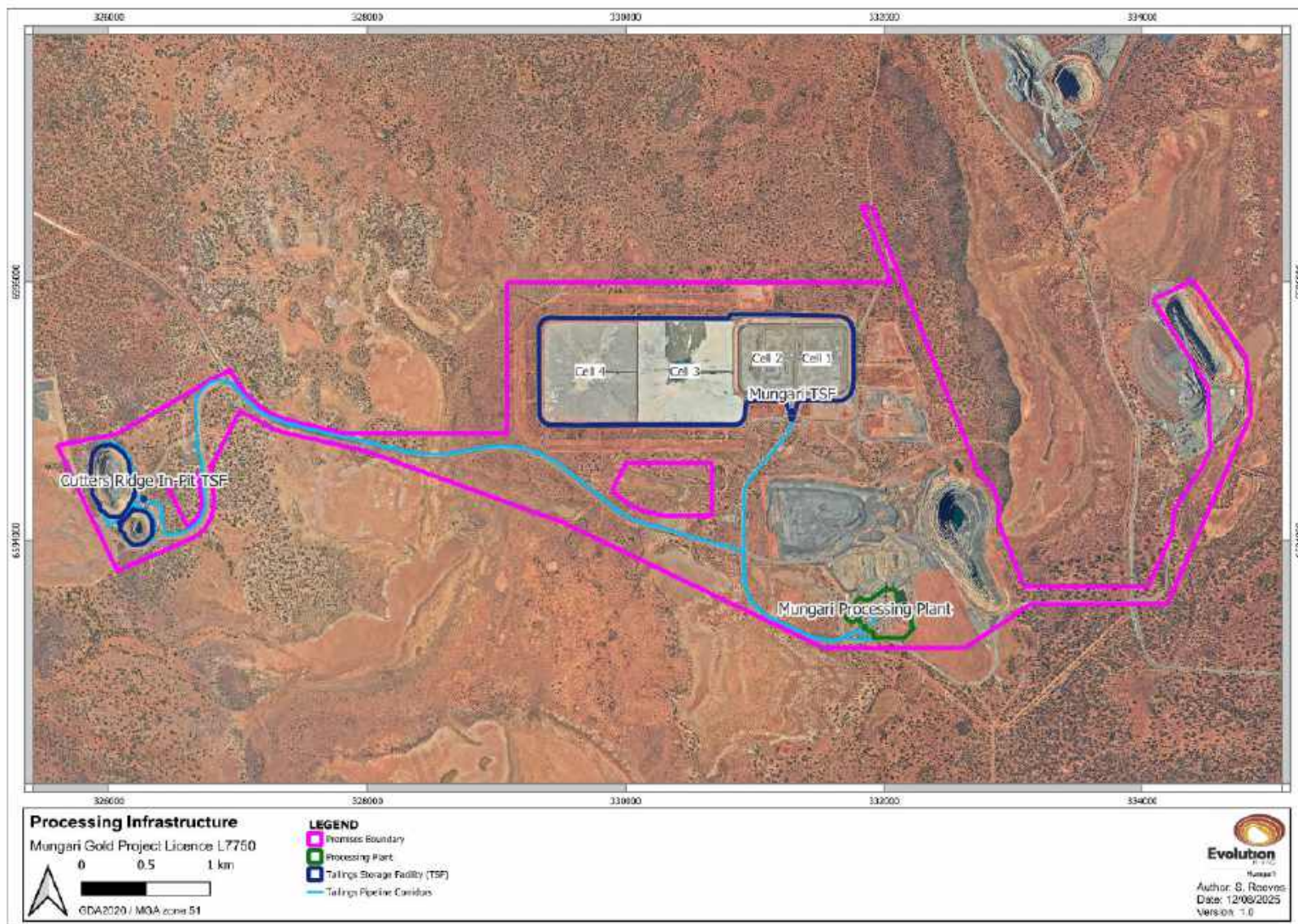


Figure 6 Processing Infrastructure

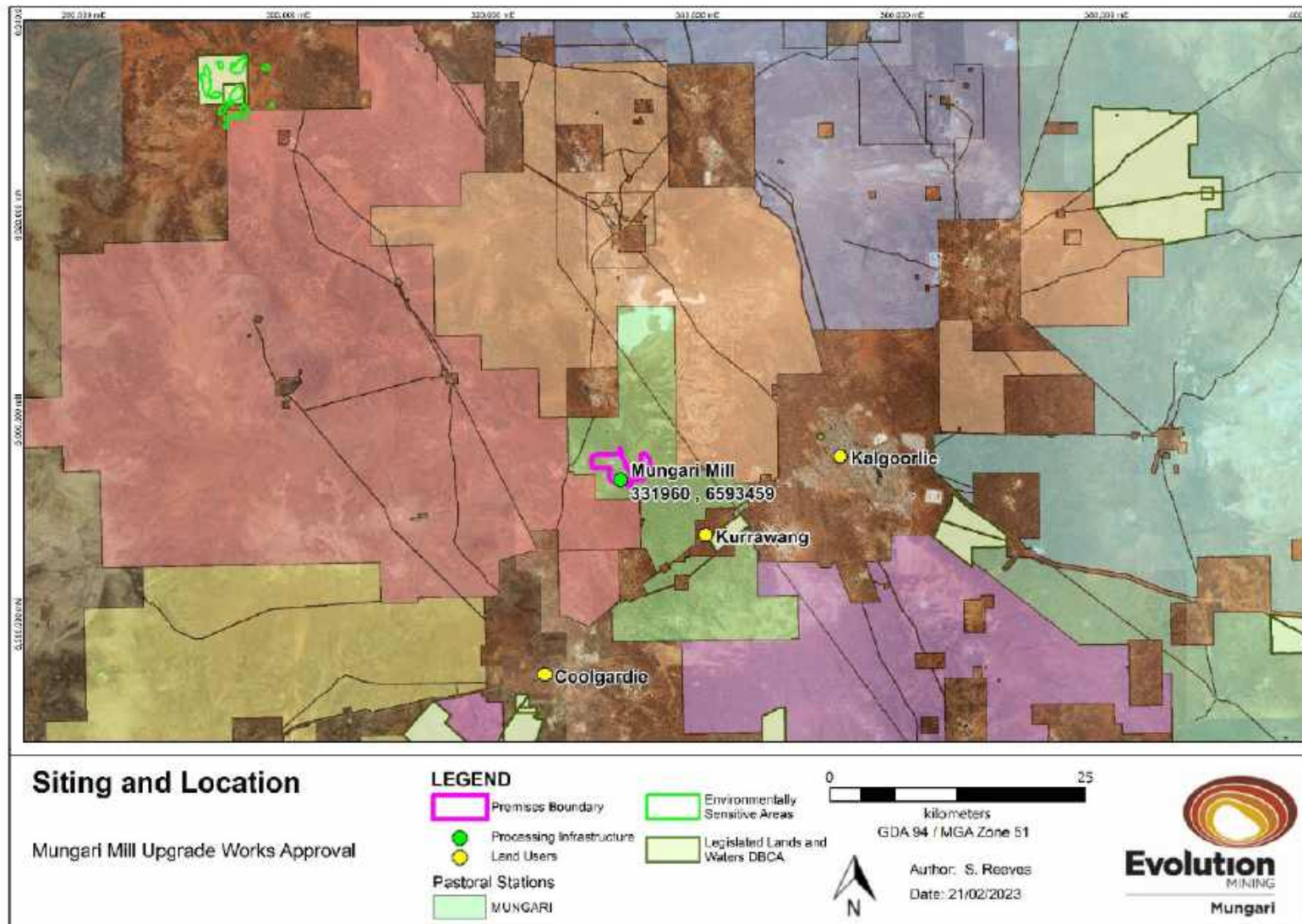


Figure 7 Siting and Location

Appendix 1 TSF Monitoring Bore Monthly Ambient Groundwater Quality

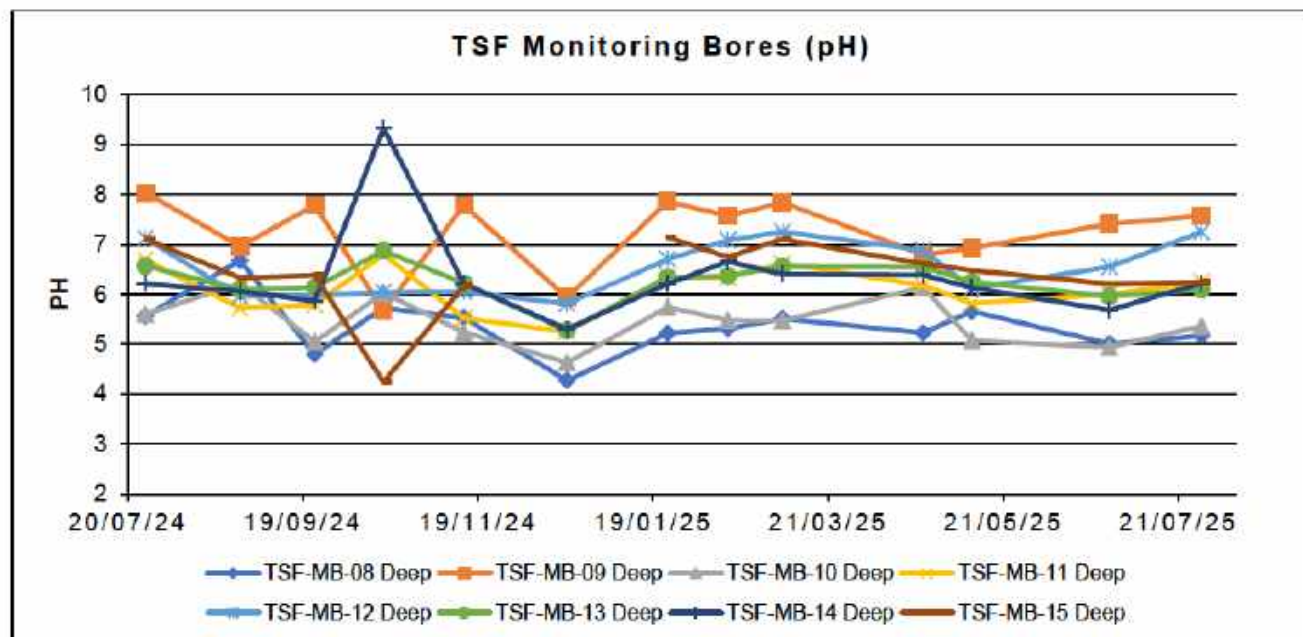


Figure 8: Monthly pH for TSF Monitoring Bores MB08-MB15

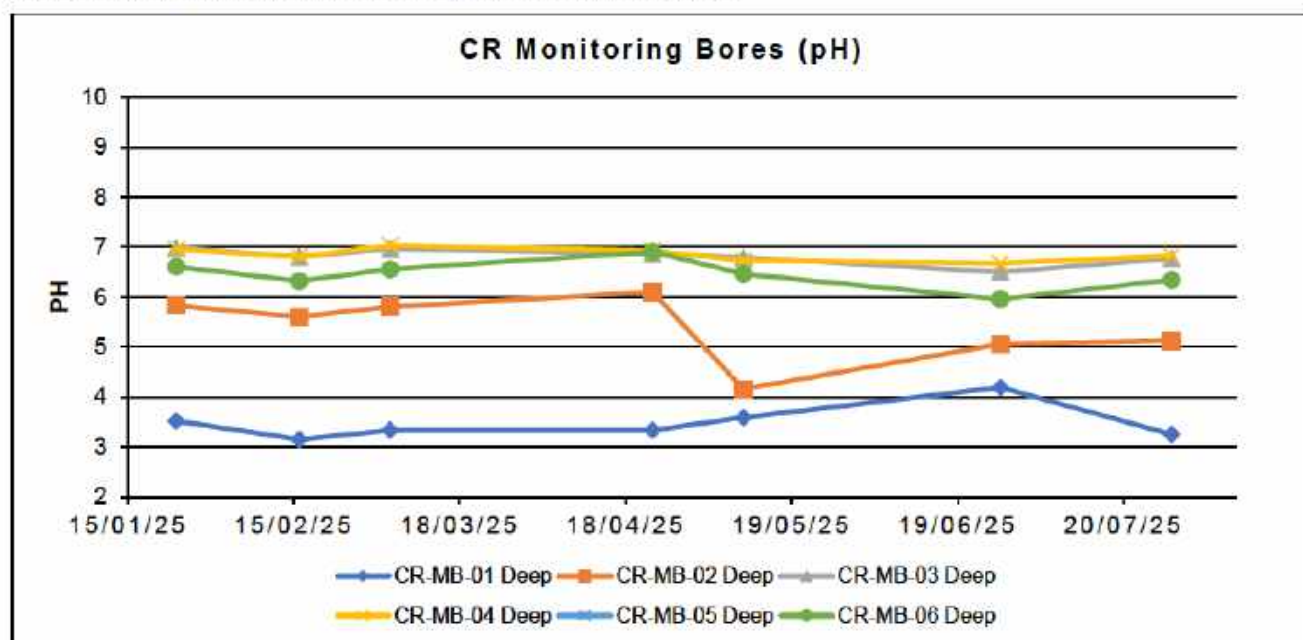


Figure 9: Monthly pH for CR Monitoring Bores MB01-MB06

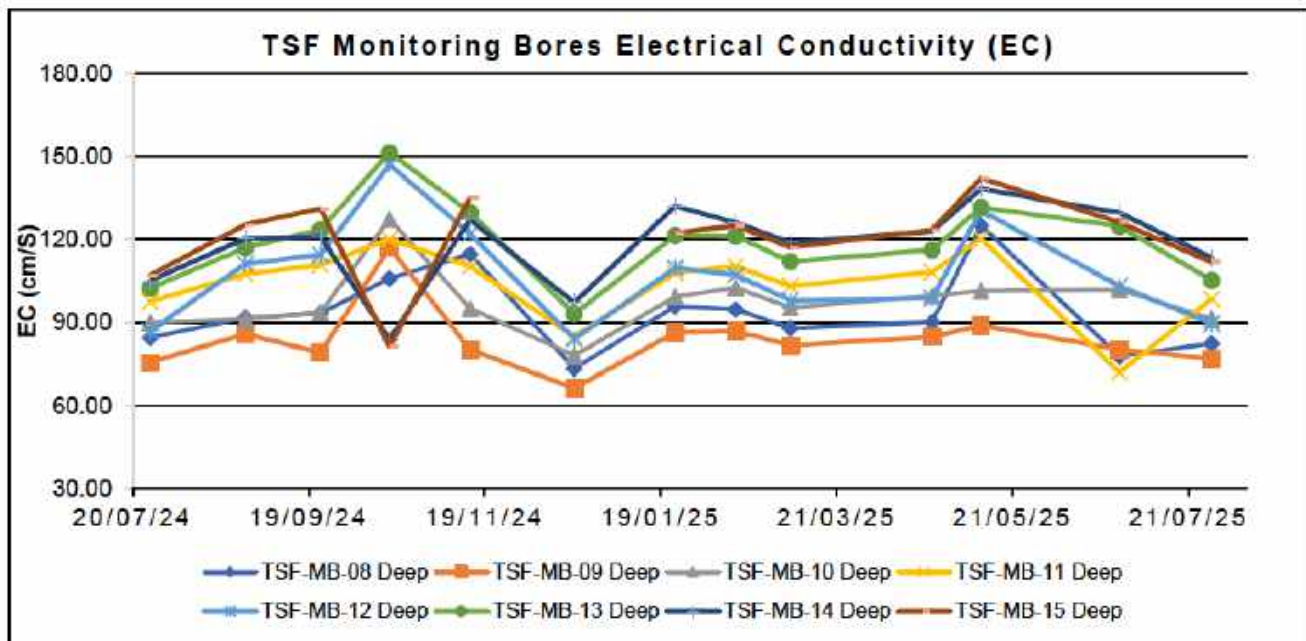


Figure 10: Monthly Electrical Conductivity for TSF Monitoring Bores MB08-MB15

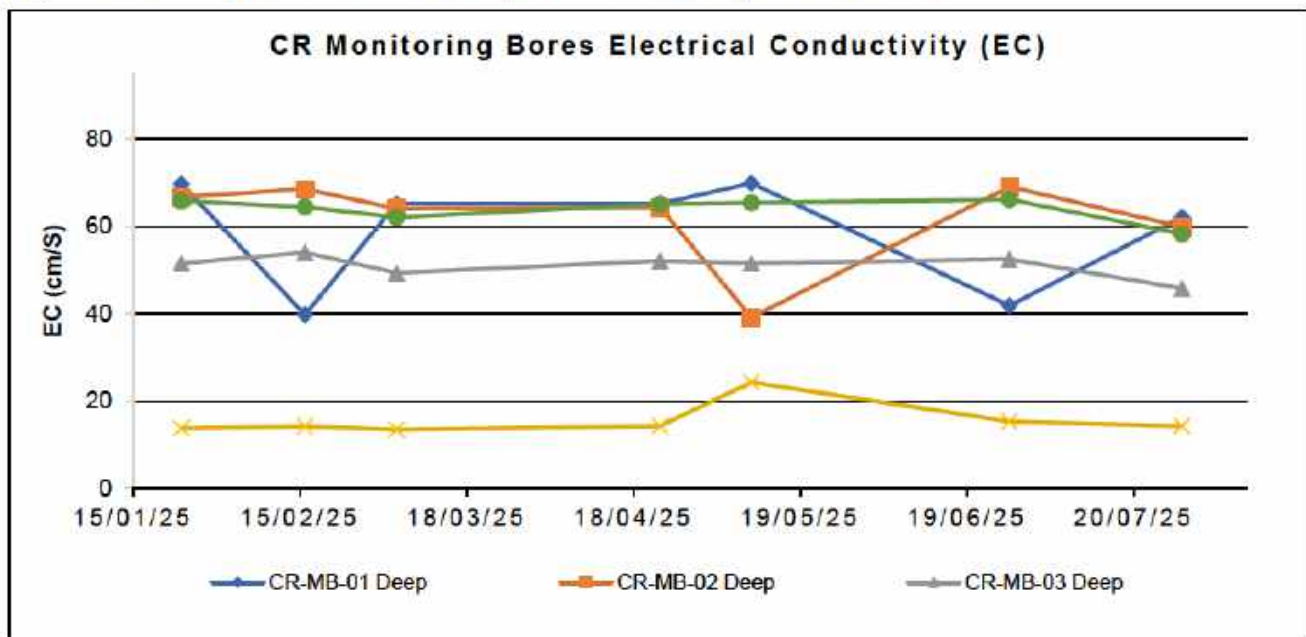


Figure 11: Monthly Electrical Conductivity for CR Monitoring Bores MB01-MB06

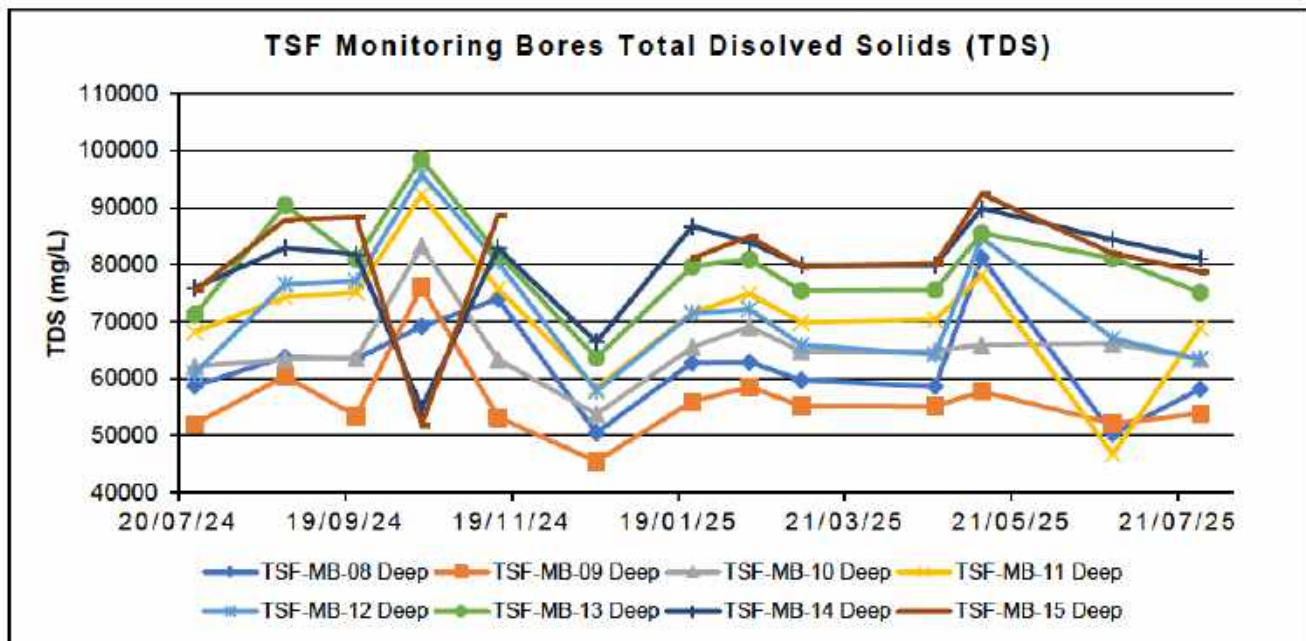


Figure 12: Monthly Total Dissolved Solids for TSF Monitoring Bores MB08-MB15

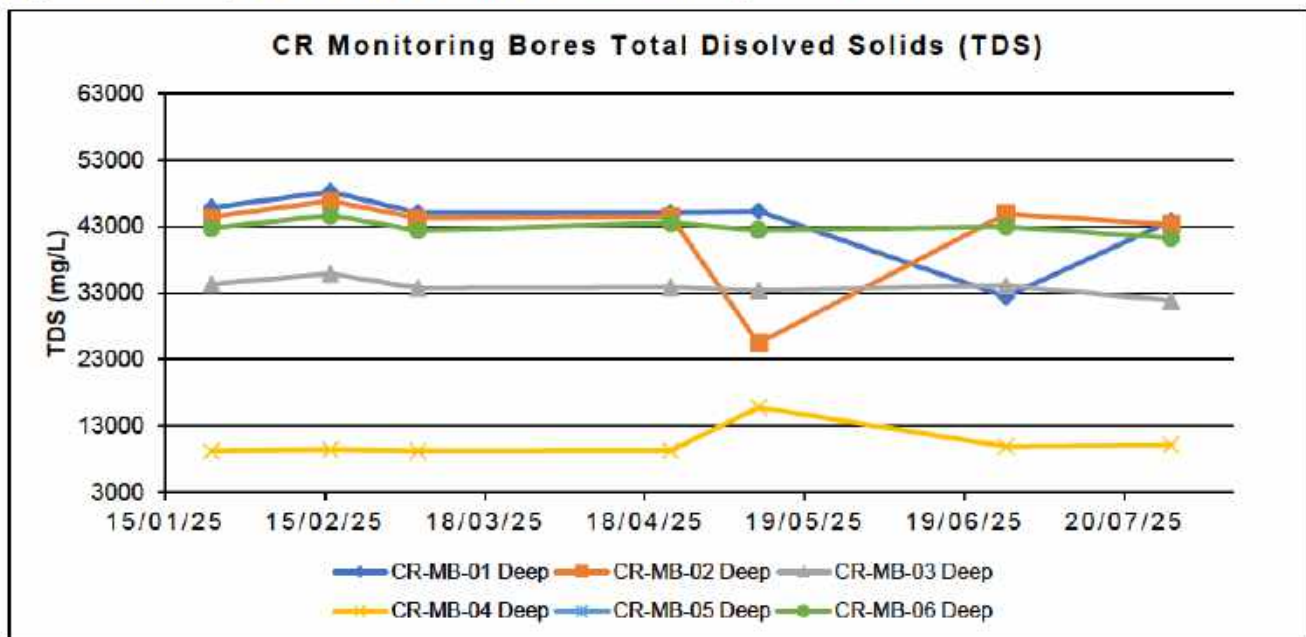


Figure 13: Monthly Total Dissolved Solids for CR Monitoring Bores MB01-MB06