



Application for Licence Amendment

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

Licence Number	L9037/2017/1
Licence Holder	Mt Marion Lithium Management Pty Ltd
ACN	666 116 365
File Number	DER2017/000308-1
Premises	Mount Marion Lithium Project Shire of Coolgardie Mining tenements M15/1000, M15/717 and on private land known as Hamptons Lease Area 53, portion of Lot 105 on Deposited Plan 40396, Volume 2668 Folio 420. As defined by the Premises maps attached to the Revised Licence
Date of Report	28 August 2024
Decision	Revised licence granted

Table of Contents

1. Decision summary	3
2. Scope of assessment	3
2.1 Regulatory framework	3
2.2 Amendment summary	3
2.3 Category 5 – Discharge of tailings to Ghost Crab Pit	4
2.4 Change sewage facility from category 85 to category 54	6
2.5 Category 73 – increase diesel storage capacity	9
3. Risk assessment.....	10
3.1 Source-pathways and receptors	10
3.1.1 Emissions and controls	10
3.1.2 Receptors.....	12
3.2 Risk ratings.....	13
4. Consultation	16
5. Conclusion	16
5.1 Summary of amendments.....	16
References.....	17
Appendix 1: Summary of licence holder’s comments on risk assessment and draft conditions	18
Table 1: Proposed design or throughput capacity changes	3
Table 2: WWTP effluent specification – provided by licence holder.....	8
Table 3: Spray field discharge loading rates.....	9
Table 4: Licence holder controls	10
Table 5: Sensitive human and environmental receptors and distance from prescribed activity	12
Table 6. Risk assessment of potential emissions and discharges from the Premises operation	14
Table 7: Consultation	16
Table 8: Summary of licence amendments	16
Figure 1: Existing tailing deposition scenario into Ghost Crab pit	5
Figure 2: Examples of optimized tailing deposition into Ghost Crab pit	5
Figure 3: Indicative Ghost Crab in-pit TSF spigot arrangement	6
Figure 4: WWTP location	7
Figure 5: As built arrangement of the WWTP	7
Figure 6: WWTP irrigation spray field as built.....	9

1. Decision summary

Licence L9037/2017/1 is held by Mt Marion Lithium Management Pty Ltd (formerly Process Minerals International Ltd) (the licence holder) for the Mount Marion Lithium Project (the premises), located in the Goldfields Region, on mining tenements M15/1000, M15/717 and on private land known as the Hamptons Lease Area 52, portion of Lot 105 on Deposited Plan 40396, Volume 2668 Folio 420.

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 L9037/2017/1 has been granted.

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 Amendment summary

On 4 April 2024, the licence holder submitted an application to the department to amend licence L9037/2017/1 under section 59 and 59B of the *Environmental Protection Act 1986* (EP Act). The following amendments are being sought:

- Request additional tailings discharge points (spigots) to the existing Ghost Crab In-Pit Tailings Storage Facility
- Transfer Wastewater Treatment Plant (WWTP) Stage Two and Three from works approval W6744/2022/1 to this licence.
 - Amending the existing Category 85 to Category 54 with a maximum capacity of 170 m³/ day.
- Administrative change of typographical error, increasing diesel storage capacity from 854 kL to 884 kL.
- Administrative change of business name from Process Minerals International Pty Ltd to Mt Marion Lithium Management Pty Ltd.

This amendment is limited only to changes to Category 5, 54, 73, and 85 activities from the existing licence. No changes to the aspects of the existing licence relating to Category 6, 12, 57, 64, and 85B 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 throughput capacity	Proposed design or throughput capacity	Description of proposed amendment
Category 5: Processing or beneficiation of metallic and non-metallic ore	Production capacity 5.0 Mtpa	N/A	Proposal to include multiple spigot discharge arrangement around Ghost Crab In-Pit TSF, which is at variance to the design approved under W5732/2014/1.

Category 6: Dewatering	650,000 tonnes (0.65 giganlitres) per annum	N/A	N/A
Category 12: Screening of material	200,000 tpa	N/A	N/A
Category 54: Sewage facility, 100 m ³ of more per day	N/A	170 m ³ /day	To be added to the licence.
Category 57: Used tyre storage	1,000 tyres	N/A	N/A
Category 64: Class II putrescible landfill	2,000 tonnes per annum	N/A	N/A
Category 73: Bulk storage of chemicals	480 kL (LNG) 854 kL (Diesel)	480 kL (LNG) 884 kL (Diesel)	Administrative change of typographical error
Category 85: Sewage facility, more than 20 m ³ but less than 100 m ³ per day	Design capacity 90 m ³ /day	-	To be removed from the licence.
Category 85B: Water desalination plant	0.73 giganlitres per annum	N/A	N/A

2.3 Category 5 – Discharge of tailings to Ghost Crab Pit

The discharge of tailings to Ghost Crab Pit was originally assessed under Works Approval W5732/2014/1. Tailings discharge occurs from a polyurethane pipeline and is deposited into the pit from the eastern crest (Figure 3).

The licence holder is requesting an improvement in longevity and overall efficiency of the TSF by changing the deposition of the tailings to multiple spigot locations rather than from one single discharge point.

The licence holder commissioned modelling to determine the TSF rate of rise based on the current single deposition point arrangement (Figure 1) and a scenario involving multiple spigots (Figure 2).

Conditions in the current licence include the requirement for the TSF to maintain a 6 m freeboard, with the tailings level not exceeding the 374 mRL. Based on the current tailings deposition strategy the licence holder predicts that once the pit crest reached the 374 mRL, the centre of the pit would only be filled to the 364.4 mRL, with a steep beach leading up to the current discharge location.

The licence holder believes that the scenarios provided in Figure 2 demonstrate a more favourable outcome, allowing the outer perimeter of the TSF to reach the 374 mRL, providing approximately 660,000 m³ of additional tailings storage. The licence holder states that the proposed various arrangements of spigots will allow flexibility to enable the most appropriate locations for the spigots and pipeline extensions to be sited. This will not only maximise the

capacity of the TSF but also enable the safe operation of the facility, through consideration of the safest accessibility and the condition of the local pit face areas, on an ongoing basis.

The intention is for the licence holder to reclaim decant water from the southern access ramp and therefore the pond needs to be centered around that location where feasible. The additional spigots around the rim should enable this by improving the control of the tailings beaching formation and therefore pond management.

The actual capacity achieved in all scenarios will be influenced by the tailings beach slope.

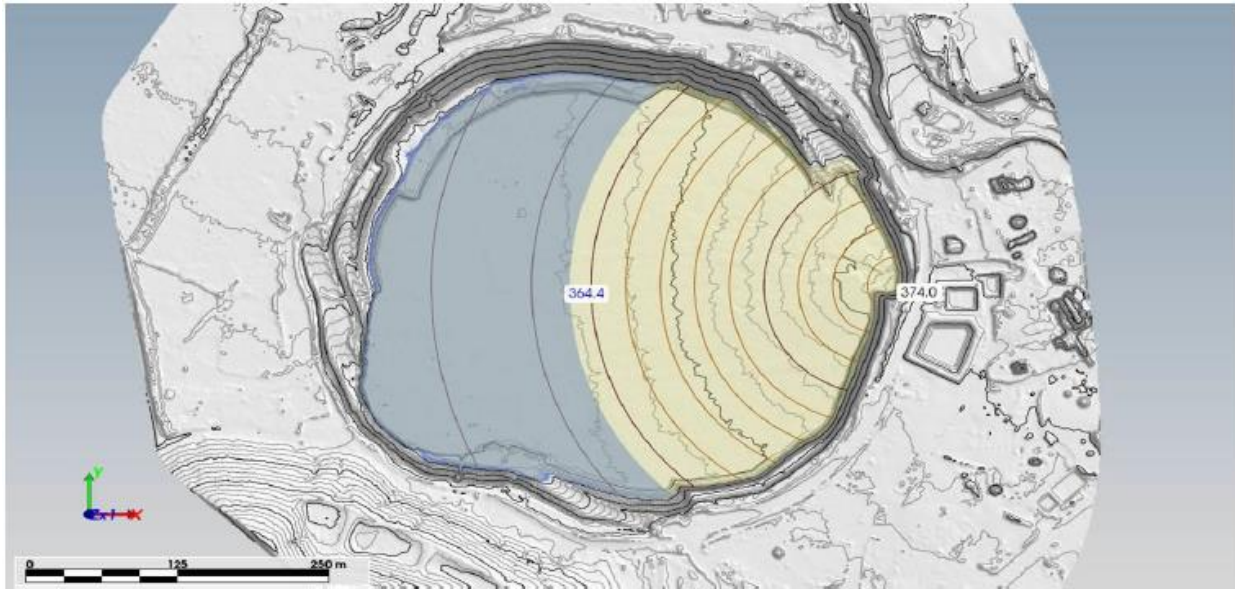


Figure 1: Existing tailing deposition scenario into Ghost Crab pit

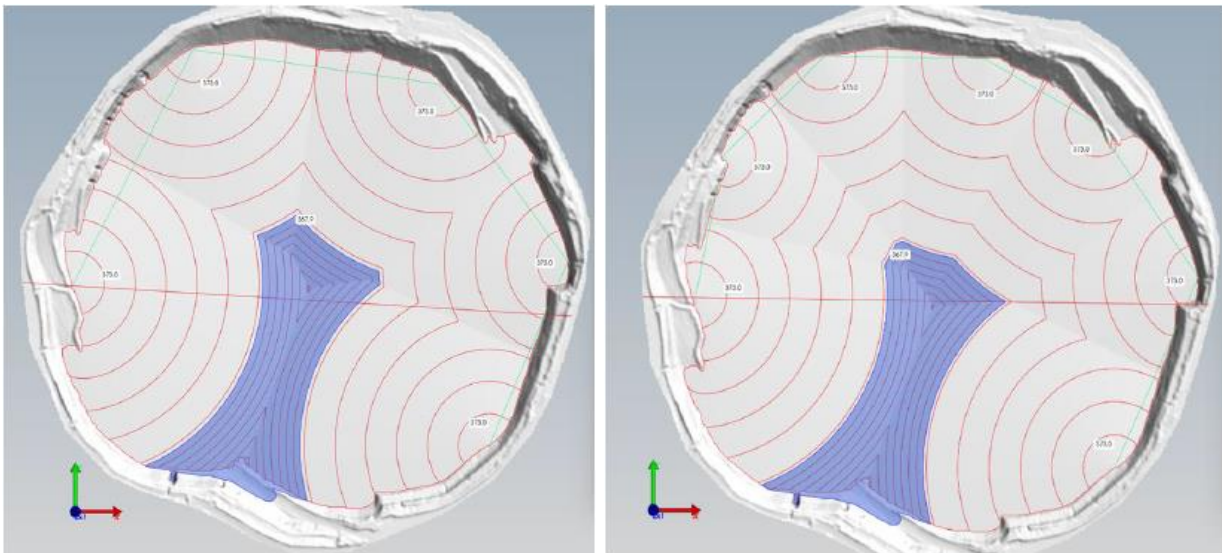


Figure 2: Examples of optimized tailing deposition into Ghost Crab pit

No increase in tailings deposition rate or change in tailings characteristics will occur because of the multiple spigots.

In addition to the above five to seven spigot scenarios provided, the licence holder notes that a further increase in storage capacity could be realised towards the end of life for the facility, when water reclaim is not as critical. This would be achieved by adding additional spigots in the south

of the TSF, to fill in the new (low lying) pond area.

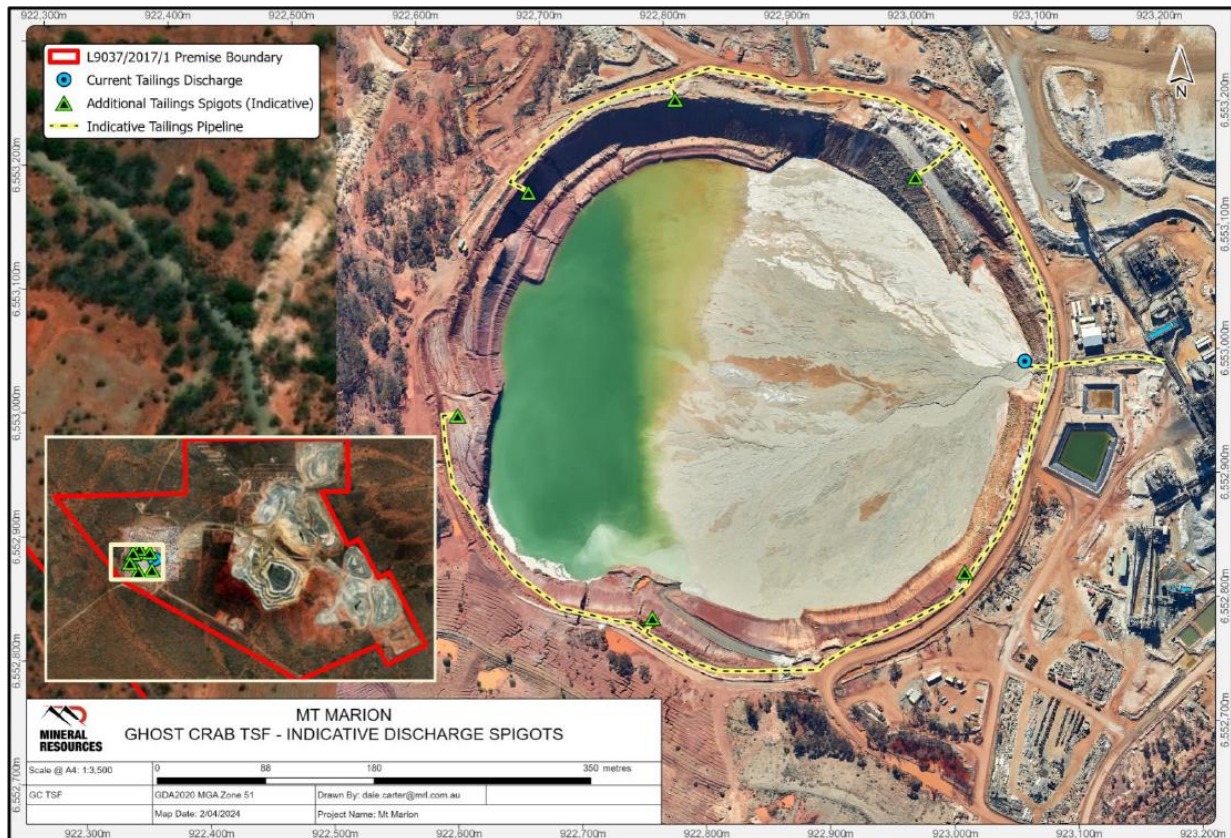


Figure 3: Indicative Ghost Crab in-pit TSF spigot arrangement

2.4 Change sewage facility from category 85 to category 54

The current licence L9037/2017/1 includes a Category 85: Sewage Facility production capacity of 90 m³/day, consisting of:

- 70 m³/day - Submerged Aerated Filter (SAF) WWTP
- 20 m³/day – Sequence Batch Reactor (SBR).

Under this amendment application the licence holder is proposing to:

- Retain the 70 m³/day SAF unit in the licence
- Remove the 20 m³/day SBR unit from the licence
- Add two 50 m³/day SBR units to the licence (constructed as part of Stages 2 and 3, under W6744/2022/1)
- Increase the total Sewage Facility throughput to 170 m³/day
- Remove Category 85 (Sewage Facility 20 – 100 m³/day) and include with Category 54 (100 m³ or more/day)
- Increase the spray field size from 3.5 ha to 6.64 ha (as per Stage 3 Compliance report, submitted to the department on 23 October 2023).

The site layout, showing the recently constructed Stage 2 and Stage 3 WWTP units, adjacent to the existing unit is below Figure 4.

An as-built arrangement of the units is detailed in Figure 5.

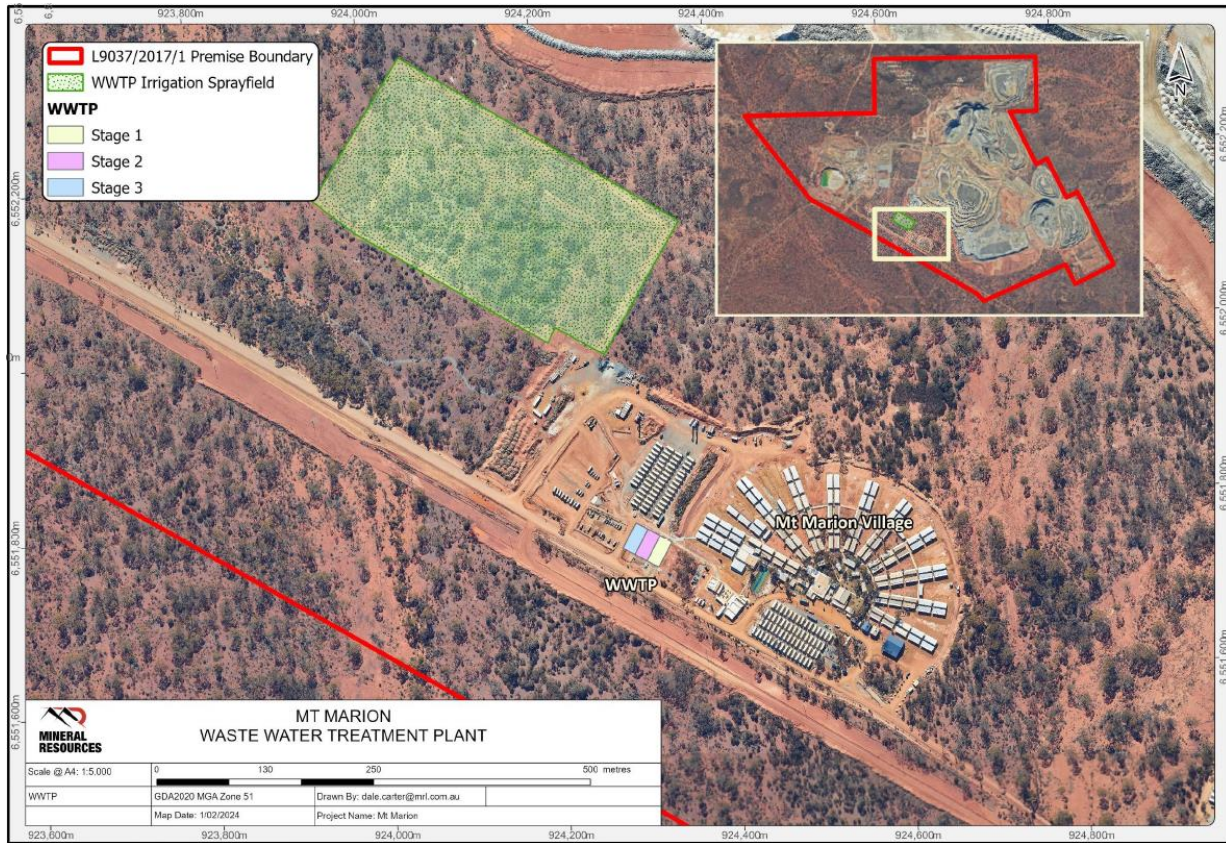


Figure 4: WWTP location

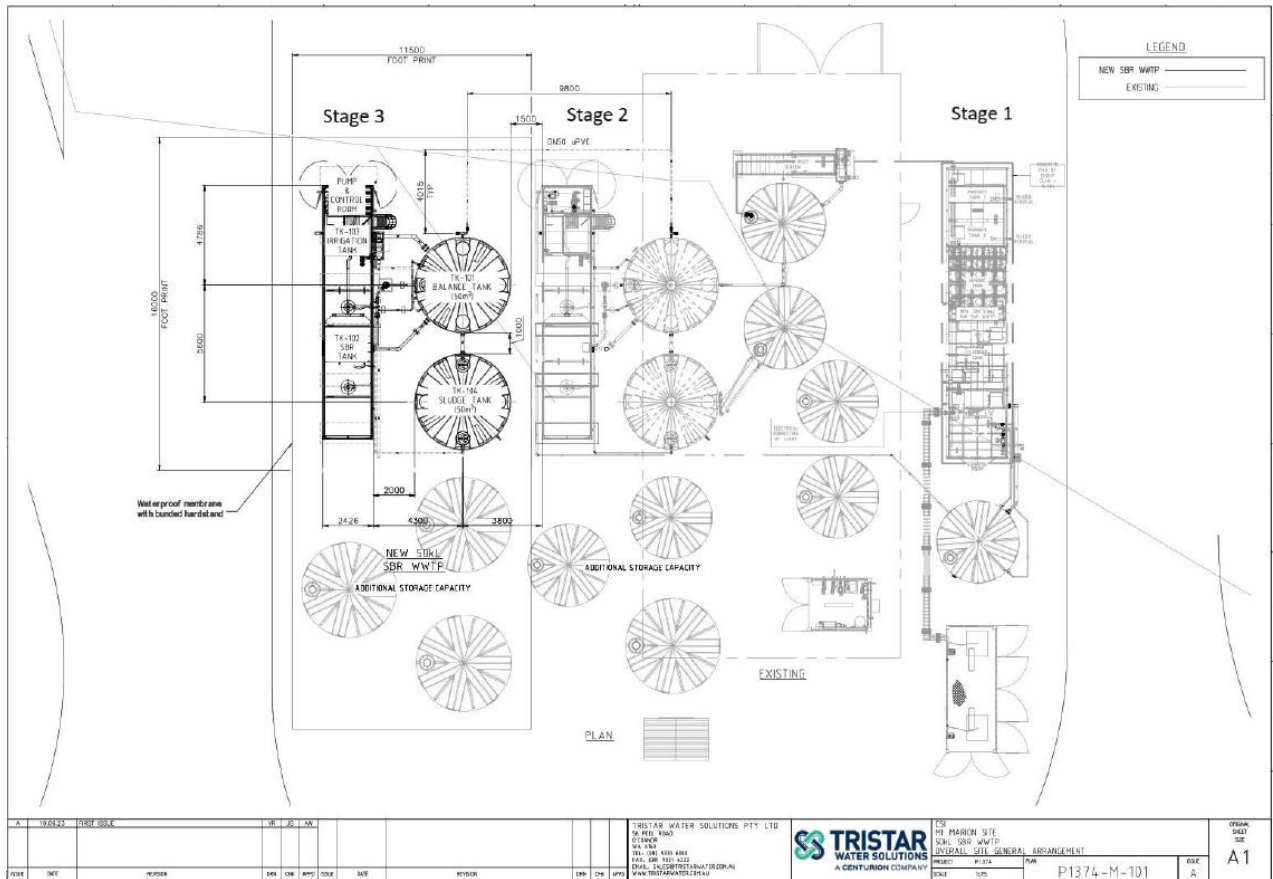


Figure 5: As built arrangement of the WWTP

The licence holder submitted Wastewater Treatment Plant (Stage 3) Environmental Compliance Report, and Commissioning Reports to the department in October 2023 and January 2024.

Effluent specifications have previously been added to licence L9037/2017/1 and these will be adjusted to match effluent water quality at Stage 3 as listed in Table 2.

Table 2: WWTP effluent specification – provided by licence holder

Description	Value	Units
Biological Oxygen Demand (BOD)	<20	mg/L
Total Suspended Solids (TSS)	<30	mg/L
Total Nitrogen (TN)	<30	mg/L
Total Phosphorus (TP)	<8	mg/L
pH	6.5-8.5	
E.coli	<1000	cfu/100ml
Effluent Chlorine	0.2-2.0	mg/L

The Time Limited Operations (TLO) report in accordance with Condition 22 of W6744/2022/1 for Stage 2 expansion of WWTP was submitted to the department on 19 April 2024. A summary of the report findings is outlined below.

Emissions water quality monitoring was missed on three occasions. The licence holder states that on 25/12/2023 and 01/12/2023, samples could not be dispatched for laboratory analysis due to the Christmas and New Year annual closure period. Sampling was undertaken on 16/01/2024, however due to delayed dispatch the laboratory holding times were exceeded

Exceedances of the limits were noted for 10 sampling events throughout the TLO period. Where parameters were reported above the emission and discharge limits during TLO, the licence holder informed Tristar (installer) who assisted in returning wastewater quality to within the design specification.

Exceedances of the limits have not occurred since 22 January 2024 and the licence holder has no evidence that environmental harm (impact to vegetation health) has occurred.

The TLO report indicates that manual flow meter readings were not taken between 22/09/2023 to 29/09/2023, 1/10/2023 to 9/10/2023 and on six individual days across the TLO period. The licence holder did estimate daily flow rate for each of these days by the change between the closest available readings.

The Delegated Officer notes that the majority of missed flow meter reading occurred in the first two weeks of WWTP TLO period, and that no exceedance to assessed production / design capacity of 170 m³/day is reported throughout TLO.

Change to WWTP irrigation spray field

The existing spray field has been extended to a 7 ha fenced area, with a spray field footprint of 6.64 ha (Figure 6). The expected nutrient loading rates from the WWTP operating at 170 m³ a day is shown in

Table 3.

Table 3: Spray field discharge loading rates

Parameter	Discharge rate	Expected quality (mg/L)	Kilograms per year	kg/ha/year
Phosphorous	170 kL/day	8	496	75
Nitrogen		30	1,861	280

The irrigation field area is located over 500 metres away from any significant surface water bodies and consists of red loamy earth (75%), loamy gravel (20%) and calcareous loamy earth (5%), which is consistent with Eutrophication Risk Category D as described in Table 1 of Water Quality Protection Note (WQPN) 22 (2008).

The Delegated Officer used calculations from WQPN 22 to determine the minimum area required for effluent irrigation is 4.14 ha. Therefore, the licence holder’s 6.64 ha spray field is adequate to discharge 170 m³ per day.

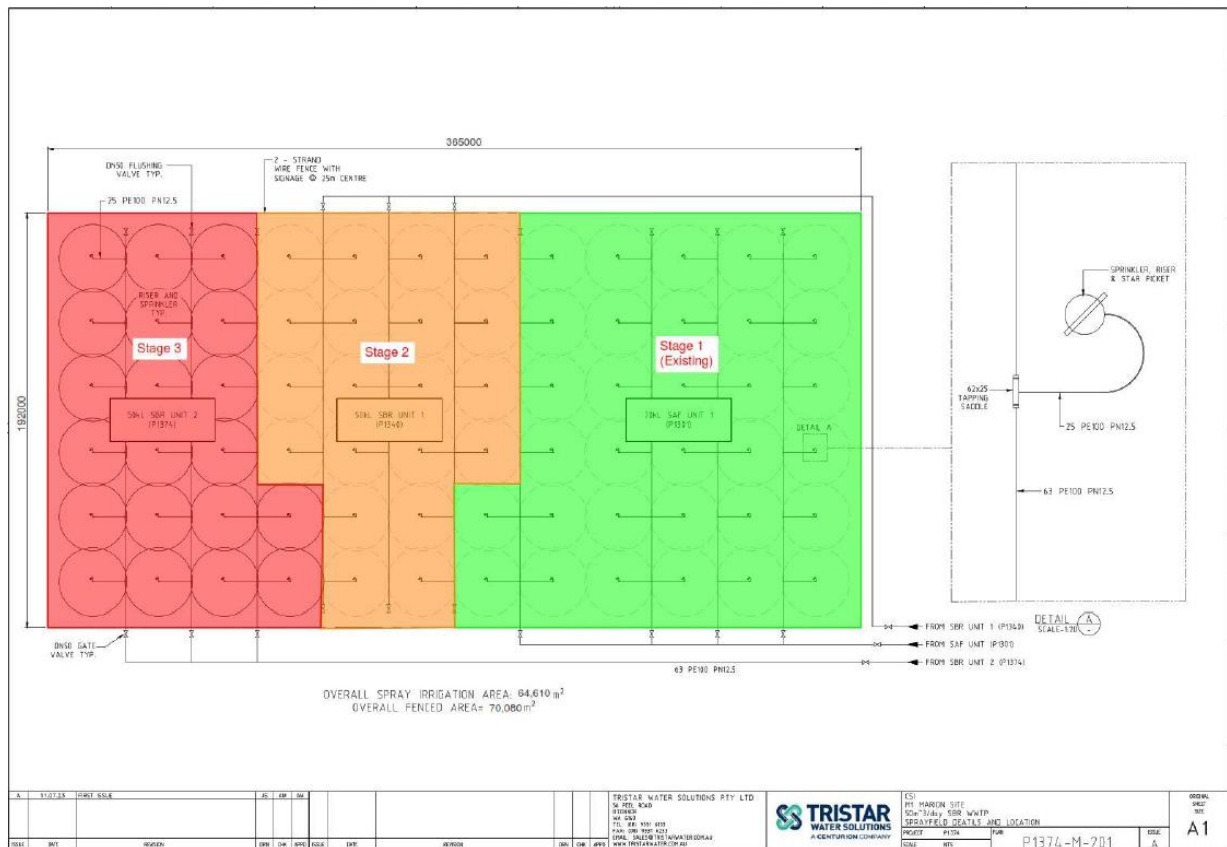


Figure 6: WWTP irrigation spray field as built

2.5 Category 73 – increase diesel storage capacity

An application to amend L9037/2017/1, submitted 8 June 2023, requested an increase to the existing capacity of diesel storage from 554 kL to 884 kL, with the inclusion of three 110,000 L diesel tanks. This was acknowledged as part of the assessment process however there was a typographic error in the final licence, issued 19 December 2023, which listed the assessed production capacity for Category 73 Diesel storage as 854 kL, 30 kL below what was requested by the licence holder.

The department has corrected this error as part of this licence amendment application.

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 4 below. Table 4 also details the proposed control measures the licence holder has proposed to assist in controlling these emissions, where necessary.

Table 4: Licence holder controls

Emission	Sources	Potential pathways	Proposed controls
Noise and vibration	<p>Operation of WWTP or sludge removal, generated from WWTP pumps and units</p> <p>Movement of mobile machinery / vehicles (including reversing alarms)</p>	Air / windborne pathway	<ul style="list-style-type: none"> Licence holder has committed to ensuring that noise emissions will comply with the <i>Environmental Protection (Noise) Regulations 1997</i>. Regular servicing/maintenance of equipment. An incident reporting system is maintained to assist in managing environmental incidents such as noise complaints.
Discharge of contaminated wastewater	Leaks or spills of wastewater or sludge / biosolids from tanks or pipelines from the WWTP during operations	Overland flow to the environment and infiltration to soil and groundwater	<ul style="list-style-type: none"> All wastewater storage components of the WWTP are impermeable (i.e. fiberglass, concrete or lined with HDPE). High-level audio-visual warning alarms are provided to indicate malfunction in the pumps in the control and effluent tanks. Tanks are within a bunded area, with bunding to be maintained to contain volume of 110% of the largest tank. Stormwater and subsoil drainage shall be diverted away from the wastewater system. Sludge generated from the treatment process will be stored in separate sludge storage tanks and pumped directly from the tanks

Emission	Sources	Potential pathways	Proposed controls
			<p>during sludge removal to avoid spillage.</p> <ul style="list-style-type: none"> • Regular inspections of the WWTP. • All pipelines will be inspected on a regular basis for leaks or damage.
<p>Treated wastewater containing contaminants (e.g. nutrients, pathogens, metals)</p>	<p>Discharge of treated wastewater to irrigation area</p> <p>Discharge of low-quality treated wastewater to irrigation area</p>	<p>Subsurface seepage through soil to groundwater</p>	<ul style="list-style-type: none"> • Treated wastewater will be discharged to a designated spray field irrigation area and comply with the existing conditions in L9037/2017/1. • Irrigation is designed that run-off, spray drift or other discharge will not occur beyond the spray field boundary. • The earthen containment bund will be maintained to prevent any wastewater travelling outside the spray field boundary. • Wastewater will be evenly distributed over the spray field irrigation area to prevent soil erosion and pooling. • Irrigation is not to occur during significant rainfall events to prevent potential discharges to surface water flows. Suitable storage will be maintained in the treated wastewater tank in case irrigation cannot occur for several days. • Regular inspections of the spray field and structure of earthen bund. • A flow meter has been installed to record the volume of treated wastewater discharged to the irrigation area.
<p>Chemical spill</p>	<p>Leaks or spills of chlorine from WWTP</p>	<p>Overland flow and infiltration to soil and groundwater</p>	<ul style="list-style-type: none"> • Chlorine stored and fully contained in a designated storage area within the WWTP. • Only low quantities of chlorine will be stored at the WWTP. • Spillages will be cleaned up and disposed in accordance with existing spill response procedures. • Any release which is likely to cause pollution or environmental harm will be reported to DWER in accordance with the EP Act.

Emission	Sources	Potential pathways	Proposed controls
Deposition of tailings into Ghost Crab in-pit TSF	Tailings and process water	Pipeline breaks or leakages resulting in tailings infiltrating subsurface groundwater quality and vegetation	<ul style="list-style-type: none"> All piping will be constructed in accordance with AS/NZS 2033:2008 "Installation of polyethylene pipe systems". Tailings pipeline will be contained within appropriately sized bunds, with any potential leaks contained or diverted into the Ghost Crab TSF. Pipelines will be inspected daily. Isolation valves, telemetry and flow metres are to be maintained to manufacturers specifications.

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 holders from its assessment. Protection of these parties often involves different exposure risks and prevention strategies and is provided for under other state legislation.

Table 5 below provides a summary of potential human and environmental receptors that may be impacted because of activities upon or emission and discharges from the prescribed premises (*Guideline: Environmental siting* (DWER 2020)).

Table 5: Sensitive human and environmental receptors and distance from prescribed activity

Human receptors	Distance from prescribed activity
Woolibar Homestead	Approximately 20 km from premises boundary. The Delegated Officer considers that due to distance there is no likely impact upon these residences, so it is not considered further as a receptor within this assessment.
Aboriginal and other heritage sites	Within the prescribed premises boundary DPLH Registered sites: 18370 – Artefacts/ Scatter, Quarry 37161 – Quarry 37162 – Quarry 37163 – Quarry The licence holder states that appropriate buffer is applied to the registered sites, ensuring they are not impacted by activities being undertaken within the prescribed premises boundary.
Environmental receptors	Distance from prescribed activity
Department of Biodiversity, Conservation and Attractions (DBCA) Legislated Lands and Waters	The closest DBCA managed land is the “Class C” Yallari Timber Reserve which is located 5 km west of the premises boundary. The Delegated Officer considers that due to distance there is no likely impact to this receptor, so it is not considered further within this assessment.

<p>Water courses</p>	<p>There are no major watercourses or important wetlands located near or within the premises boundary.</p> <p>Lake Lefroy is approximately 25 km southeast of the WWTP area.</p> <p>Minor surface water lines have been identified within prescribed premises boundary, one 150 m west the WWTP and irrigation area.</p>
<p>Underlying groundwater (non-potable purposes)</p>	<p>Groundwater is within the Goldfields Groundwater Area and includes shallow ephemeral lakes or unconfined aquifers that are saline or hypersaline.</p> <p>The site has recorded groundwater quality with a pH of 6.4 and with total dissolved solids (TDS) concentrations of 30,000 mg/L to 40,000 mg/L.</p> <p>Deeper regional aquifers in the area are hypersaline, typically ~140,000 mg/L TDS (Aquaterra, 2008).</p> <p>Depth to groundwater ranges between 8 – 60 mbgl.</p>

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 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 6.

The Revised Licence L9037/2017/1 that accompanies this Amendment Report authorises emissions associated with the operation of the Premises i.e. Category 5 and 54 activities.

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

For noting, while noise, odour and dust emissions are generated from site activities, as there are no identified receptors likely to be impacted, these emissions have not been included in the risk table below.

Table 6. Risk assessment of potential emissions and discharges from the Premises operation

Risk Event					Risk rating ¹ C = consequence L = likelihood	Licence Holder's controls sufficient?	Conditions ² of licence	Justification for additional regulatory controls	
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Licence Holder's controls					
Operation									
Leaks or spills of wastewater or sludge/biosolids from tanks or pipelines from the WWTP during commissioning and operations	Discharge of contaminated/potentially contaminated stormwater into the environment Discharge of waste to land Leachate	Overflow to the environment and infiltration to soil and groundwater, causing ecosystem disturbance and degradation to groundwater quality	Beneficial (non-potable) users of groundwater Minor surface watercourse adjacent to the WWTP irrigation area	Refer to section 3.1.1	C = Minor L = Unlikely Medium Risk	Y	Condition 1, Condition 8, Condition 9	The Delegated Officer considers that the controls proposed by the licence holder are adequate for managing the WWTP in a way that prevents system failures, and these have been included as controls within the revised licence.	
Discharge of treated wastewater to the WWTP irrigation area	Low quality treated wastewater containing contaminants (e.g. nutrients, pathogens, metals) Treated wastewater containing contaminants (e.g. nutrients, pathogens, metals)	Subsurface seepage causing contamination of soil and degradation of groundwater quality			Refer to section 3.1.1	C = Minor L = Unlikely Medium Risk	Y	Condition 1, Condition 8, Condition 9, Condition 12	The Delegated Officer considers that the controls proposed by the licence holder are adequate for managing low quality / treated wastewater containing contaminants and these have been included as controls within the revised licence.
Leaks or spills of chlorine from WWTP	Chemical spill	Overland flow and infiltration to soil and groundwater causing ecosystem disturbance and degradation to groundwater quality			Refer to section 3.1.1	C = Minor L = Rare Low Risk	Y	Condition 1, Condition 8	The Delegated Officer is of the opinion that the risks can be adequately managed through the licence holder's controls and by section 49 of the EP Act.

Risk Event					Risk rating ¹ C = consequence L = likelihood	Licence Holder's controls sufficient?	Conditions ² of licence	Justification for additional regulatory controls
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Licence Holder's controls				
Deposition of tailings into Ghost Crab in-pit TSF	Tailing and process water	Pipeline breaks or leakages resulting in tailings infiltrating subsurface impacting groundwater quality and vegetation	Groundwater, surrounding vegetation	Refer to section 3.1.1	C = Minor L = Unlikely Medium Risk	Y	Condition 1, Condition 3, Condition 14	The Delegated Officer does not believe the change to deposition into Ghost Crab TSF will significantly increase environmental risk. The licence holder has indicated that pipelines will be constructed in accordance with AS/NZS standards and within bunding to contain any optional spills.

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

Table 7: Consultation

Consultation method	Comments received	Department response
Application advertised on the department's website 21 June 2024	None received	N/A
Licence Holder was provided with draft amendment on 9 August 2024.	Response to draft documents was received by the department on 16 August 2024.	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 8 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 8: Summary of licence amendments

Condition no.	Proposed amendments
Cover page	Update licence holder name and ACN. Update prescribed premises category description table <ul style="list-style-type: none"> Add Category 54: Sewage facility and capacity of 170 m³/day Remove Category 85: Sewage facility, capacity of 90 m³/day Fix typographic error in Category 73: Bulk storage of chemicals from 854 to 884 kL of diesel.
Condition 1, Table 2. Tailings storage facility (tailings) Ghost Crab in-pit TSF	Insert operational requirements: <ul style="list-style-type: none"> Tailings discharge to Ghost Crab to be via multiple spigots, which will be rotated to achieve an even rate of tailings rise within the facility. All piping will be constructed in accordance with AS/NZS 2033:2008 <i>"Installation of polyethylene pipe systems"</i> and contained within appropriate sized bunding to contain any potential spills.
Condition 1, Table 2. Category 54 Wastewater treatment plant	Add in new row for Category 54: Sewage facility infrastructure and equipment. Insert operational requirements: <ul style="list-style-type: none"> Tank bunding to be maintained to contain volume of 110% of the largest tank. Treated effluent is to be discharged via irrigation to the 6.64 ha

	<p>irrigation field indicated in Schedule 1, Figure 1</p> <ul style="list-style-type: none"> • Sprinklers in the irrigation field are to be maintained and operated such that the effluent does not pond or runoff from the irrigation field.
<p>Condition 1, Table 2. Category 85 Wastewater treatment plant</p>	<p>Remove rows related to Category 85: Sewage facility infrastructure and equipment.</p>

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. Department of Water 2008, *Water Quality Protection Note 22 - Irrigation with nutrient-rich wastewater*, Perth Western Australia
5. Mineral Resources Limited 2023, *Wastewater Treatment Plant Stage 3 Environmental Compliance Report*, Osbourne Park, Western Australia.
6. Mineral Resources Limited 2024, *Wastewater Treatment Plant Stage 3 Environmental Commissioning Report*, Osbourne Park, Western Australia.
7. Mineral Resources Limited 2024, *Stage 2 WWTP Time Limited Operations Report*, Osbourne Park, Western Australia.
8. Process Minerals International Ltd 2024, *Application form and supporting documentation*, "Licence Amendment Application Part V Environmental Protection Act 1986", Osbourne Park, 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
Cover page	<p>Please replace with</p> <p>Licence Holder: Mt Marion Lithium Management Pty Ltd</p> <p>ACN: 666 116 365</p> <p>Process Minerals International Pty Ltd (PMI) was appointed to perform the mining and operational services at the Mt Marion Lithium project on behalf of the Mt Marion Lithium Joint Venture (MML).</p> <p>Following a recent internal entity review and reorganisation, MML have provided their approval for PMI to assign the mining services and operational responsibilities at Mt Marion to the newly formed subsidiary, Mt Marion Lithium Management Pty Ltd (MLM).</p> <p>Effective 1 July 2024, MLM is the operating entity of the Mt Marion Lithium project.</p>	<p>The Delegated Officer notes this change and has reviewed the ASIC abstract confirming this change.</p> <p>The listed Licence Holder and ACN have been updated on the cover page of the revised licence and amendment report.</p> <p>Mt Marion Lithium Pty Ltd is the registered tenement holder (MLM).</p>
Condition 8, Table 5 - Treated effluent quality limits table	<p>Please revert to previous licence limits:</p> <ul style="list-style-type: none"> BOD: 30 mg/L Total Suspended Solids: 40 mg/L <p>Although the purpose of this licence amendment was to integrate Stages 2 & 3 of the Wastewater Treatment Plant (WWTP) from works approval W6744, the existing WWTP (Stage 1) needs to be considered in regard to establishing the parameters for treated effluent quality. ABOUT 40% of the overall effluent load (design capacity) is generated from the older (Stage 1) SAF unit and which was not designed to achieve the amended loadings.</p> <p>To clarify, the amended licence for Mt Marion Wastewater Treatment Plant (WWTP) will include three treatment streams reporting to the spray field:</p> <ul style="list-style-type: none"> Stage 1: Submerged Aerator Filter (SAF) – 70 m³/day Stage 2: Sequence Batch Reactor (SBR) – 50 m³/day Stage 3: Sequence Batch Reactor (SBR) – 50 m³/day <p>The licence holder therefore request that the original parameters treated effluent quality are</p>	<p>The Delegated Officer notes that the existing Stage 1 SAF unit cannot achieve the amended loadings. Having reviewed the annual nutrient loading balance with the existing nutrient concentrations (50 mg/L for nitrogen and 12 mg/L for phosphorus) and revised total discharge rate of 170 L/day, the proposed irrigation area of 6.64 ha is still sufficient, with 6.46 ha required (annual nitrogen loading being the limiting factor).</p> <p>The Delegated Officer has specified the original treated effluent quality limits set on the previous licence.</p>

Condition	Summary of licence holder's comment	Department's response
	retained.	
Amendment report, Table 4 - Licence holder controls	<p>The licence holder request that the reference to the freeboard within each tank is removed.</p> <p>Reference to the freeboard within each tank was referenced in the risk assessment of the original supporting document however this is not a critical control to adequately manage the risk of potential overflow and discharge of effluent into the environment.</p> <p>The following existing controls (listed below) are of greater significance to manage this risk, including:</p> <ul style="list-style-type: none"> • High level audio- visual warning alarms are provided to indicate malfunction in the pumps in the control and effluent tanks. • Tanks are within a bunded area, with bunding to be maintained to contain volume of 110% of the largest tank. 	<p>The Delegated Officer accepts the proposed change as it does not significantly alter environmental risk.</p> <p>The control related to tanks being within a bunded area with volume 110% of the largest tank is included in the revised licence.</p>