MINERAL RESOURCES

SUPPORTING DOCUMENT

FLOTATION PLANT AND PASTE PLANT WORKS APPROVAL APPLICATION

MT MARION LITHIUM PROJECT

27/02/2026 VERSION 01

DOCUMENT INFORMATION

Contact

[redacted]

Revision History					
Version	Issue Date	Prepared by	Reviewed By	Approved By	Document Purpose
[redacted]					Supporting document to Works Approval Application Form IR-F09 v16.0

Acknowledgement of Country

MinRes is committed to reconciliation and recognises and respects the significance of Aboriginal and Torres Strait Islander peoples' communities, cultures, and histories. MinRes acknowledges and respects Aboriginal and Torres Strait Islander peoples as the traditional custodians of the land.

EXECUTIVE SUMMARY

Introduction

Mt Marion Lithium Management Pty Ltd (MLM) operates the Mt Marion Lithium Project (the Project), located 36 kilometres (km) south-west of the City of Kalgoorlie-Boulder in the Eastern Goldfields region of Western Australia.

The Project is licensed to operate under *Environmental Protection Act 1986* (EP Act) Licence L9037/2017/1 (L9037) originally granted 27 June 2017, with additional supporting infrastructure approved for construction, commissioning and Time Limited Operation (TLO) under Works Approval W6744/2022/1 (W6744) approved 9 January 2023.

Application Information

This document supports a Works Approval Application (WAA) for a new Flotation Plant and Paste Plant. A flotation plant was previously approved at this site; however, this application relates to a new plant design and configuration to be constructed within the existing approved footprint.

To date, Mount Marion Lithium operations have focused spodumene recovery efforts on the coarse fraction. The Flotation Plant will allow extra product to be obtained from the value reject streams that report to tailings, which predominantly consists of fine-fraction material.

The proposed location of the Flotation and Paste Plants falls within the already approved Disturbance Envelope associated with Mining Proposal (MP) Reg ID 129825 and Native Vegetation Clearing Permit (NVCP) CPS8632/3, accordingly, no additional native vegetation clearing is required. This supporting document describes the receiving environment and a series of technical studies undertaken to support the WAA.

An assessment of risks associated with the WAA demonstrates that potential emissions and discharges can be effectively managed to ensure there are no significant impacts to ecological and human receptors. Details on the management of emissions and pollution control are provided via a risk assessment.

TABLE OF CONTENTS

Figures

Tables

Appendices

Appendix A **Proof of Occupier Status**

Appendix B **Stakeholder Engagement Register**

Appendix C **Environmental Commissioning Plan**

Appendix D [redacted]

ABBREVIATIONS

Abbreviation	Definition
ABAB	Arid Bronze Azure Butterfly
ACH Act	*Aboriginal Cultural Heritage Act 2021*
ACHIS	Aboriginal Cultural Heritage Inquiry System
AHA	*Aboriginal Heritage Act 1972*
APEC	Areas of Potential Environmental Concern
BGL	Below groundwater level
CALM	*Conservation and Land Management Act 1984*
CEMP	Construction environmental management plan
CPS	*Clearing Permit System 2003*
CS	Contaminated Sites Act
DBCA	Department of Biodiversity, Conservation and Attractions
DMPE	Department of Mining, Petroleum and Exploration
DMS	Dense media separation
DPLH	Department of Planning, Lands and Heritage
DWER	Department of Water and Environmental Regulation
EEL	East Exemption Location 53
EMS	Environmental Management System
EP Act	*Environmental Protection Act 1986*
EPBC Act	Environmental Protection Act 1999
FEL	Front-end loading
GL	Gigalitres
GWOS	Groundwater Operating Strategy
HIC	High intensity conditioning
HPGR	High pressure grinding rolls
IBSA	Index of Biodiversity Surveys for Assessments
ILUA	Indigenous Land Use Agreement
IMSA	Index of Marine Surveys for Assessments
JV	Joint venture
LNG	Liquefied natural gas
LOM	Life of mine
MIMS	medium intensity magnetic separators

Abbreviation	Definition
ML	Megalitre
MLM	Mt Marion Lithium Mine
MML	Mt Marion Lithium Management group
MP	Mining Proposal
MSA	Mining services agreement
MSDS	Materials Safety Data Sheet
MW	Megawatt
NVCP	Native Vegetation Clearing Permit
PDWSA	Public drinking water source area
PEC	Priority ecological communities
PSI	Preliminary site investigator
RIWI Act	*Rights in Water and Irrigation Act 1914*
RO	Reverse osmosis
ROM	Run of mine
TEC	Threatened ecological communities
TLO	Time Limited Operations
TLO	Train Load Out
TSF	Tailings Storage Facility
WA	Western Australia
WAA	Works Approval Application
WHIMS	Wet high intensity magnetic separators
WWTP	Waste water treatment plant

1. BACKGROUND AND SCOPE

1.1 PROJECT CONTEXT AND LOCATION

Mt Marion Lithium Management (MLM) is a 100% subsidiary of Mineral Resources Limited (MinRes), which holds an exclusive Life of Mine (LOM) Mining Services Agreement (MSA) with Mt Marion Lithium Pty Ltd (MML), the holder of most of the tenements for the Mt Marion Lithium Project (Mt Marion or the Project). Pursuant to this MSA, MinRes designed, built and now operates the Project through a joint venture agreement with MLM and Ganfeng Lithium Co. Ltd.

The Project is licensed to operate under *Environmental Protection Act 1986* (EP Act) Licence L9037/2017/1 (L9037) originally granted 27 June 2017, and most recently amended 18 February 2026.

The Project is located 36 kilometres (km) south-west of the City of Kalgoorlie-Boulder in the Eastern Goldfields region of Western Australia (**Figure 1**).

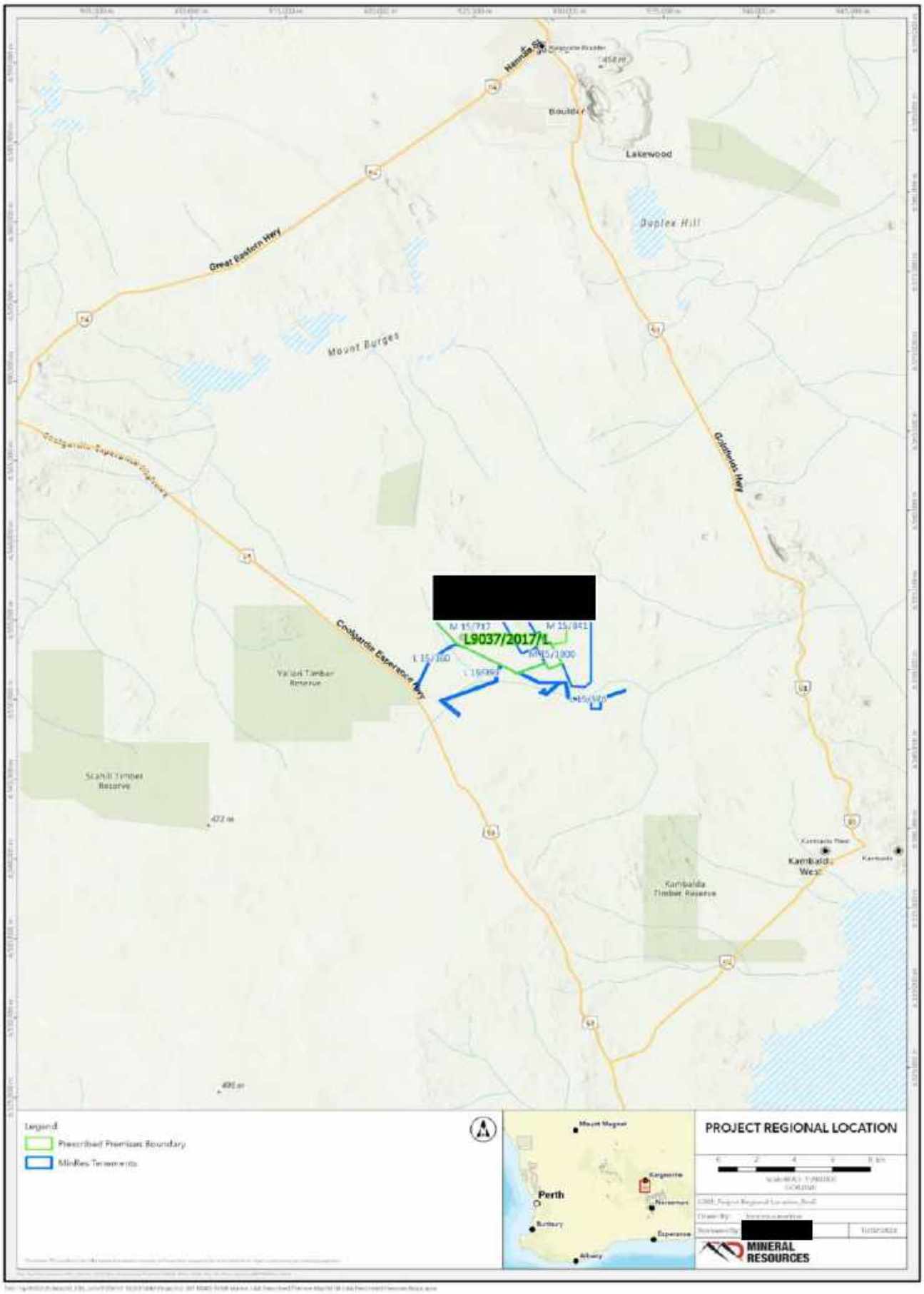

Figure 1: Map of Project Location

1.2 APPROVALS BACKGROUND

Approval for the Project was initially obtained under the *Mining Act 1978* (Mining Act) via Mining Proposal (MP) REGID 28674, granted on 2 February 2012. The most recent MP was granted on 27 February 2025, REGID 129825.

The Project is licensed to operate under EP Act Licence L9037/2017/1 (dated 18/02/2026) which includes the following prescribed premises categories:

- Category 5: Processing or beneficiation of metallic or non-metallic ore
- Category 6: Dewatering
- Category 12: Screening of Material
- Category 54: Sewage Facility
- Category 57: Used tyre storage
- Category 64: Class II putrescible landfill
- Category 73: Bulk storage of chemicals
- Category 85B: Water Desalination.

Infrastructure and equipment approved under L9037/2017/1 for the Project can be summarised into the following areas:

- Crusher and Beneficiation Plants (and associated equipment)
- Mobile Screening Plant
- Tailings, Process Water and Dewatering Infrastructure
- Waste disposal and storage
- Bulk fuel storage
- WWTP comprising a Submerged Aerated Filter
- WWTP comprising two Sequence Batch Reactors
- Other activities (bioremediation pad, accommodation, motor control centres, control rooms, administration offices, workshops, final product stockyard and weighbridge).

The Prescribed Premises Map is illustrated below as **Figure 2** and referenced as Attachment 2 in the DWER Application Form.

The most recent Works Approval, W6744/2022/1, was granted on 9 January 2023 for the construction of a Wastewater Treatment Plant (WWTP). Time Limited Operations for the WWTP infrastructure concluded on 14 July 2024. It was subsequently included in the Licence granted on 28 August 2024. W6744/2022/1 is still active, however all infrastructure has been constructed and transferred to operating licence L9037/2017/1. A separate application to surrender W6744/2022/1 will be submitted via an *Application Form: Surrender works approval of licence.*

Other environmental approvals granted for the project include those summarised in **Table 1.**

Table 1: Other environmental approvals

Relevant Legislation	Environmental Factor regulated/affected	Relevant approval requirement
Health (Treatment of Sewage and Disposal OF Effluent and Liquid Waste) Regulations 1974	Treatment of Sewage	Approval to Construct or Install and Apparatus for the Treatment of Sewage – Approval No: 165.22
Mining Act 1978 and *Mining Regulations 1981*	Land & Soils/ Water Resources/ Rehabilitation & Closure	Mining Proposal and Mine Closure Plan (REG ID 129825) authorises mining and associated activities

Relevant Legislation	Environmental Factor regulated/affected	Relevant approval requirement
		within the approved proposal boundary
Rights in Water and Irrigation Act 1914	Inland Waters	MinRes has received relevant approvals: 5C Licence - GWL200665(3) & GWL174427(4)
Planning and Development Act 2005	Flora & Vegetation/Terrestrial Fauna/ Landforms	Approval for Mount Marion operations through the Shire of Coolgardie - PA-12/2019
Environment Protection Act 1986 (Part V)	Biodiversity (clearing of native vegetation)	Clearing Permits: • CPS 8632/3 (expiry 12 January 2030) • CPS 10813/1 (expiry 18 June 2035) • CPS 10840/1 (expiry 7 May 2035) • CPS 9866/1 (expiry 23 September 2033). Note an amendment application is currently under assessment to remove conditions related to conservation significant flora and fauna, reflecting the delisting of *Eremophila acutifolia* and findings of the SRE survey.

1.3 PURPOSE OF THIS DOCUMENT

This document supports an application for a Works Approval under Part V of the *Environmental Protection Act 1986* (EP Act) to construct a Flotation Plant and a Paste Plant at the Project. This supporting document, together with the completed DWER Application Form provided with the application, constitutes the Works Approval application pursuant to Part V of the EP Act. **Table 2** provides a summary of where information is referenced in the Application Form.

Table 2: DWER Application Form References

Application Form References	MinRes Reference
Part 1: Application type	Refer to Application Form
Part 2: Applicant details	Refer to Application Form Supporting Document, Executive Summary
• Attachment 1A: Proof of Occupier Status	Refer to Application Form
• Attachment 1B: ASIC Company Extract	Refer to Application Form
• Attachment 1C: Authorisation to act as representative of the occupier	Refer to Application Form
Part 3: Premises details	Refer to Application Form Supporting Document, Section 1.1

Application Form References	MinRes Reference
Attachment 2: Premises Map	Refer to Application Form Supporting Document, Section 1.1, Figure 1
Part 4: Proposed activities	Refer to Application Form Supporting Document, Section 5
• Attachment 3A: Environmental Commissioning Plan	Refer to Application Form Supporting Document, Appendix C
• Attachment 3B: Proposed activities	Supporting Document, Section 5
• Attachment 3C: Map of area proposed to be cleared	Supporting Document, Section 5, Figure 3 Note no new clearing is required under this application.
Part 5: Index of Biodiversity and Marine Surveys for Assessments (IBSA and IMSA)	Refer to Application Form
Part 6: Other DWER approvals	Supporting Document, Section 1.2
Part 7: Other approvals and consultation	Supporting Document, Section 1.2, Section 6
• Attachment 5: Other approvals and consultation documentation	Supporting Document, Section 6, Appendix D
Part 8: Applicant history	Refer to Application Form
Part 9: Emissions, discharges and waste	Refer to Application Form Supporting Document, Section 5.3
Part 10: Siting and location	Refer to Application Form Supporting Document, Section 8
• Attachment 7: Siting and Location	Refer to Application Form Supporting Document, Section 8
Part 11: Submission of any other relevant information	Refer to Application Form
• Attachment 8: Additional Information Submitted	Refer to Application Form
Part 12: Category checklist(s)	Refer to Application Form
Part 13: Proposed fee calculation	Refer to Application Form Supporting Document, Section 10
• Attachment 10: Proposed fee calculation	Supporting Document, Section 10
Part 14: Commercially sensitive or confidential information	Refer to Application Form
• Attachment 11: Request for Exemption from publication	Refer to Application Form
Part 15: Submission of application	Refer to Application Form
Part 16: Declaration and signature	Refer to Application Form

2. PRESCRIBED PREMISES

2.1 PRESCRIBED PREMISES CATEGORIES

The Premises currently operates under EP Act Licence L9037/2017/1 (L9037) with the current granted Prescribed Premises categories, as presented in **Table 3**.

Under this Works Approval application, both the Flotation Plant and Paste Plant will form additional infrastructure under Category 5. No change to the approved production capacity limit is proposed.

Table 3: Prescribed Premises Categories - L9037/2017/1

Current Approved Prescribed Premises Categories L9037		
Category Number	**Category Description**	**Approved Premises Production or Design Capacity**
Category 5	Processing or beneficiation of metallic and non-metallic ore	5.0 Mtpa
Category 6	Dewatering	650,000 tpa (0.65 GL)
Category 12	Screening of Material	200,000 tpa
Category 54	Sewage Facility	170 m3/day
Category 57	Used tyre storage	1,000 tyres
Category 64	Class II putrescible landfill	2,000 tpa
Category 73	Bulk storage of chemicals	884 kL Diesel 480 kL LNG
Category 85B	Water desalination plant	0.73 GLpa

2.2 LEGAL LAND DESCRIPTION

The Prescribed Premises is situated within mining tenements M15/1000, M15/717, M15/841 and [redacted] The tenement and holder details for the land that comprises the Prescribed Premises boundary is provided in **Table 4**.

The Prescribed Premises boundary and associated legal land description for this Works Approval Application will align with the current approved L9037/2017/1.

Table 4: Tenements and Holder Details

Tenement	Area (Ha)	Holder	Granted	Expiry
M15/717	980.6	Mt Marion Lithium Pty Ltd	19/09/1994	18/09/2036
M15/1000	402.5	Mt Marion Lithium Pty Ltd	20/08/2009	19/08/2030
M15/841	866.4	A.C.N. 665 883 509 PTY LTD	19/08/1996	18/08/2038

Tenement	Area (Ha)	Holder	Granted	Expiry

3. APPLICANT INFORMATION

3.1 APPLICANT AND OCCUPIER DETAILS

The site is operated by Mt Marion Lithium Management Pty Ltd (MLM), which is a 100% owned subsidiary of Mineral Resources Limited (MinRes). MLM is the operator of the Mt Marion Lithium Project on behalf of Mt Marion Lithium Pty Ltd (MML) and is the holder of L9037/2017/1.

Tenements M15/1000 and M15/717 are held by Mt Marion Lithium Pty Ltd (MML) which is a Joint Venture (JV) between Mt Marion Holdings Pty Ltd (a 100% owned subsidiary of MinRes) and Jiangxi Ganfeng Lithium Co. Ltd. **Figure 2** provides the ownership structure for Mt Marion assets. A.C.N. 665 883 509 PTY LTD is part of the MinRes group of companies, as listed on the Current Company Extract.

Proof of occupier status is provided in Appendix A.

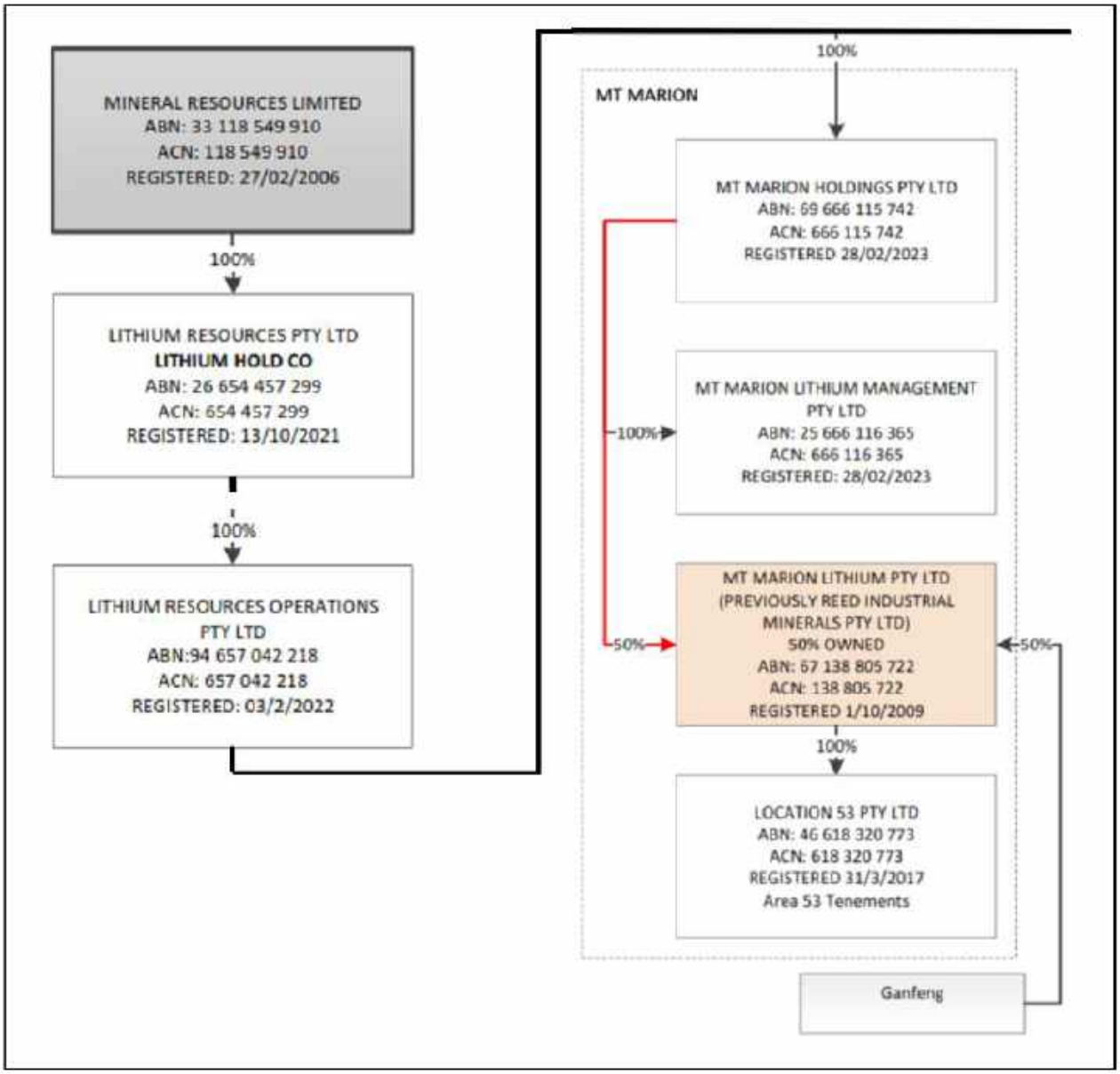

Figure 2: Ownership Structure of the Mount Marion Lithium Project

3.2 AUTHORISED REPRESENTATIVE AND CONTACT PERSON

[redacted]

4. CURRENT APPROVED FACILITY

4.1 CRUSHING PLANT

Mined ore is stored on a run of mine (ROM) pad from where it is fed to the crushing plant. The crushing plant consists of a multi-stage, closed circuit operation that produces a product <6.5 mm. ROM rock is reclaimed from the ROM pad via a front-end loader (FEL) and charged into a ROM bin. This rock is transported to a primary crusher using a vibrating grizzly feeder, which removes the fine material. The crushed rock from the primary crusher joins the grizzly undersize and passes under a tramp metal magnet before being conveyed to a vibrating grizzly feeder that feeds a pre-crush cone crusher.

The crushed rock from the pre-crush cone crusher is conveyed to a secondary feed bin and secondary screens. The oversized material is circulated through the secondary cone crushers until it is reduced in size and is able to pass through the secondary screen. The screen middlings are sent to the tertiary crushing circuit where it enters a tertiary feed bin then screens with the oversize circulating through the tertiary cone crushers. The undersize from the secondary and tertiary screens are directed to the coarse ore open stockpile where they are stacked.

In the event if the primary crusher and pre-crush cone crusher are down for maintenance, the ROM rock will be transported to the standby primary jaw crusher for processing, where the crushed rock is then conveyed to the secondary feed bin and secondary screens.

4.2 DENSE MEDIA SEPARATION PLANT

4.2.1 Feed Preparation

The crushed ore is reclaimed from the stockpile using a FEL and fed to the feed bin. The crushed ore is classified using a series of feed preparation screens:

- To produce a coarse material for the feed to the Dense Media Separation (DMS) plant, and
- To a fines material (tertiary fines) that is not recoverable by existing DMS plant

As described in Section 5, the tertiary fines material along with a portion of the DMS reject are proposed to be directed to the new flotation plant for processing to recover additional spodumene concentrate. The DMS reject includes but is not limited to tertiary fines, secondary sinks or High Pressure Grinding Rolls (HPGR) regrind fines. Prior to feeding into new flotation plant, the tertiary fines material and the DMS reject are dewatered via dedicated cyclone clusters to provide density suitable for the flotation mill feed.

4.2.2 Dense Media Separation

The current beneficiation plant consists of a DMS plant involving mica removal, HPGR regrind, magnetic separation, dense media cyclones and media recovery. The proposed activities will be incorporated into the existing processing plant facilities.

Further detail on the DMS circuit is provided in Sections 4.2.2.1 and 4.2.2.3.

4.2.2.1 Mica Removal

Within each DMS circuit, mica is initially removed via dedicated density classifiers. The mica overflow streams are directed to dewatering screens with the oversize reporting to the truck load out (TLO) bin and then transported to waste dump for disposal as dry stack tailings. The undersize is pumped to the tailings thickener, where the thickened slurry is disposed to an active tailings storage facility.

4.2.2.2 HPGR REGRIND AND MAGNETIC SEPARATION

For the secondary DMS feed, material can be sent for grinding in the HPGR to improve particle liberation. Depending on the spodumene content in the ground fines, it is pumped either to:

- Existing tailings filter for dewatering before the filter cake is disposed to TLO bin for disposal as dry stack tailings or
- New flotation plant to recover additional spodumene concentrate

The ground material is sent to a magnetic separation circuit for magnetic gangue rejection before feeding the non-magnetic material to dense media cyclones for processing. The magnetic material reports to the tailings thickener and then into an active TSF. It can also be directed to dense media cyclones for processing without magnetic separation.

4.2.2.3 Dense Media Cyclones and Media Recovery

The underflow from the density classifiers from each of the DMS circuits is then combined with a circulating media, consists of mixture of ferrosilicon and magnetite. The circulating media has a slurry density of between 2.7 to 3.1 t/m³, where the slurry density is controlled through process water addition. The mixture of circulating media slurry and coarse ore is pumped under pressure into the dense media cyclone to begin separating the ore components. The two density mechanisms are:

- Reject DMS reject has a nominally lower density (~ 2.6 t/m³) than that of the circulating media. Thus, it floats and flows into the cyclone overflow and is discharged.
- The spodumene concentrate has a nominal density greater than the circulating media (~ 3.0t/m³). The result is that the spodumene sinks into the cyclone underflow and is discharged.

The spodumene product and the DMS reject discharge onto dedicated trains of two sequential screens serving identical functions for each cyclone product. The first screen provides a draining zone. This allows for the separation of the circulation media from the spodumene product or DMS reject product. The recovered circulating media slurry is dewatered via dedicated densifiers. The densifier underflow is recycled back to the cyclone feed hopper to mix with classifier underflow (i.e. fresh coarse ore). The second screen is a washing zone, where the spodumene product or DMS reject product are washed to remove any remaining circulating media. The wash water combines with the densifier overflow and then pumped to the low intensity magnetic separators. The media recovered as magnetic stream is returned to the circulating media hopper, while the non-magnetic stream reports to tails thickener.

After dewatering, the spodumene products from each DMS circuit are conveyed and are then stacked separately in the stockyard. Each of the spodumene product stockpiles are reclaimed using a FEL onto the trucks, where the concentrate is shipped as bulk concentrate via Kwinana or Esperance. The DMS reject post dewatering from each DMS circuit are transported to the TLO bin and then trucked to waste dump for disposal as dry stack tails.

5. PROPOSED ACTIVITY

This document supports a Works Approval Application for the construction of a Flotation Plant and Paste Plant in addition to the existing processing plant. In summary this involves:

- Construct, commission and operate a Flotation Plant to improve spodumene recovery from tertiary fines and Dense Media Separation (DMS) rejects, while reducing waste and optimising water usage; and
- Construct, commission and operate a Paste Plant to enable underground mining backfill using filtered tailings.

Table 5 provides the Prescribed Premises categories proposed for this works approval application.

Table 5: Proposed Prescribed Premises categories

Prescribed Premises Category	Premises Production or Design Capacity
Category 5: Processing or beneficiation of metallic and non-metallic ore	5 Mtpa

The indicative locations of the Flotation and Paste Plant are provided in **Figure 3.**

The proposed footprint of the Flotation Plant, including the supporting infrastructure is 1 ha and is contained entirely within areas previously cleared under the current approved Native Vegetation Clearing Permit (NVCP) CPS 8632/3.

Figure 3: Map of Indicative Location of the Flotation Plant and Paste Plant

5.1 FLOTATION PLANT

5.1.1 Design

The conceptual flow diagram of the Flotation Plant process is presented in **Figure 4**, with each of the steps detailed from Sections 5.1.1.1 to 5.1.1.4.

The proposed Flotation Plant general arrangement is presented in **Figure 5**.

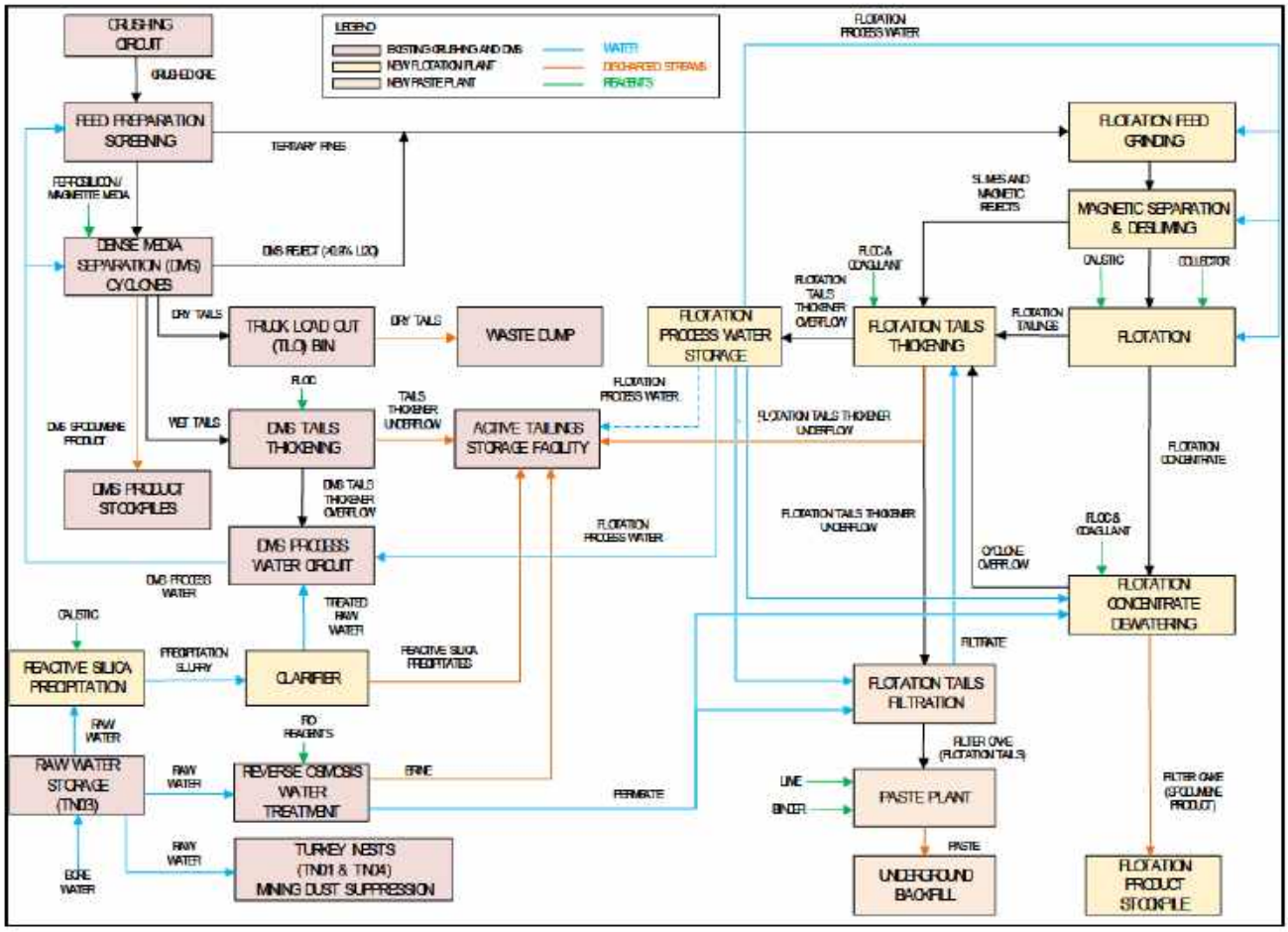

Figure 4: Flow Diagram of Proposed Spodumene Ore Processing

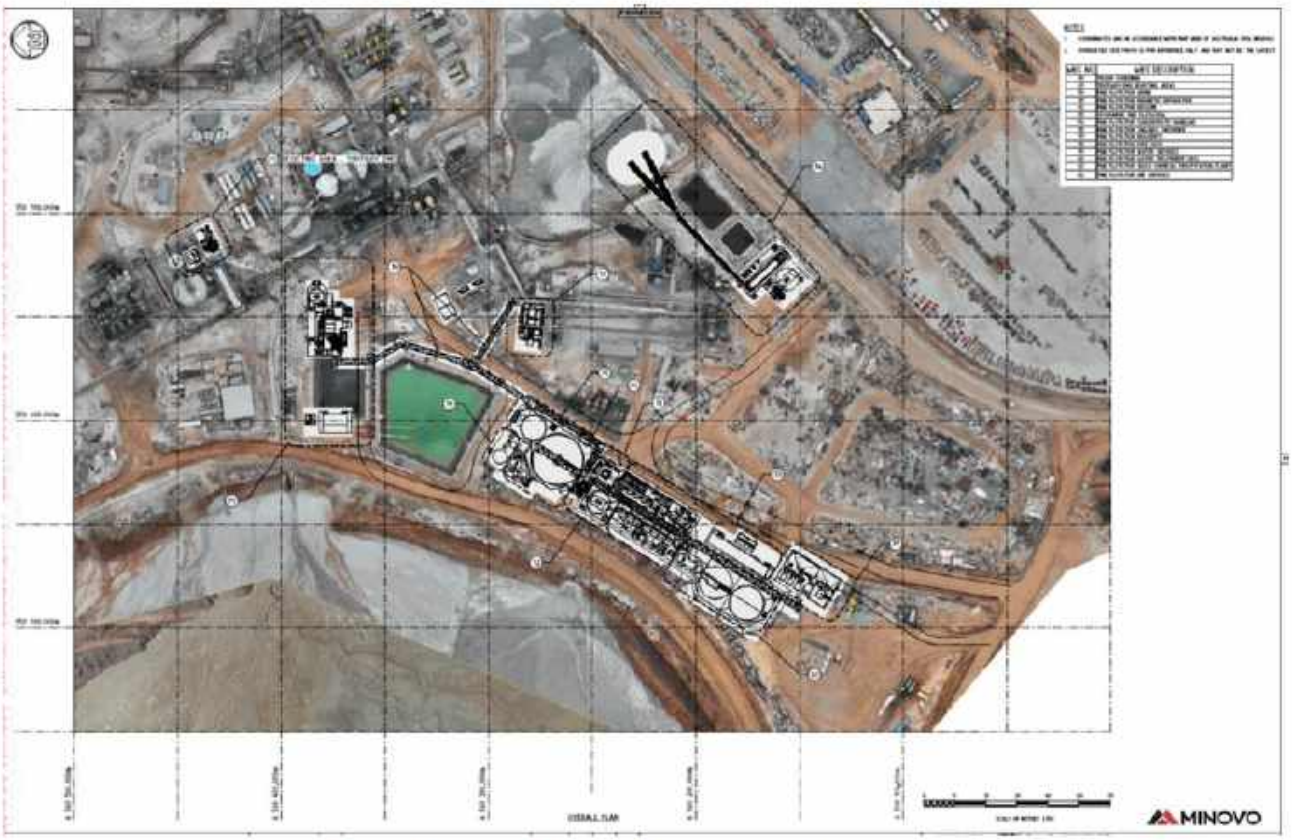

Figure 5: Proposed Flotation Plant General Arrangement

5.1.1.1 Flotation Plant Feed Preparation

The tertiary fines, along with selected DMS reject streams, are dewatered via dewatering cyclone clusters. The overflow from the dewatering cyclones reports to the existing DMS tailings thickener, while the underflow is pumped to the new flotation plant. Slurry will be pumped from the agitated surge tanks to the new flotation ball mill discharge hopper. Any spillage in the flotation feed preparation area is directed to the sumps equipped with recovery pumps within the tertiary circuit.

5.1.1.2 Flotation Milling

The cyclone underflow (or flotation fresh feed slurry) is pumped from the agitated surge tank to the flotation ball mill discharge hopper and combined with the mill discharge. From there, it is pumped to the flotation ball mill classification either via a cyclone cluster or screening. The flotation ball mill produces a target product P80 of approximately 150 µm for downstream processing. The oversize is returned to the flotation mill via the mill feed chute.

The flotation ball mill is equipped with a trommel, which rejects oversize particles and mill ball chips to a bunker for disposal. The trommel undersize gravitates to the mill discharge hopper.

There are sump pumps in the flotation milling area to recover any spillage into the mill discharge hopper.

5.1.1.3 Magnetic Separation and Deslime

Cyclone overflow from the flotation milling will be fed to dedicated iron removal circuits, consisting of medium intensity magnetic separators (MIMS) followed by wet high intensity magnetic separators (WHIMS). Magnetics will be discharged to the tailings thickener.

Non-magnetics will be fed to a deslime cyclone cluster. The deslime cyclone cluster will cut at approximately 10-20 µm, with the slimes discharging to the final tailings thickener. The deslimed

cyclone underflow material will gravitate to the flotation feed surge tank, while the cyclone overflow reports to the flotation tailings thickener.

There are sump pumps in the flotation magnetic and deslime area to recover any spillage into the non-magnetic hopper.

5.1.1.4 Flotation

The cyclone underflow is pumped from the flotation feed surge tank to a series of high intensity conditioning (HIC) agitated tanks. Flotation reagents are added into the first HIC tank, with pH modifier (caustic) and flotation collector, before being dosed into the tank. Overflow from the second HIC tank will enter the rougher feed dilution tank and diluted to target pulp density prior to feeding into flotation.

5.1.1.4.1 Flotation Water Services

Process Water

Flotation tailings thickener overflow is stored in a flotation process water storage tank and distributed to the flotation plant or DMS plant when required.

Reverse Osmosis Permeate

Raw water is pumped to two parallel existing RO plants. Permeate is pumped to a flotation RO permeate tank. Brine reports to the existing brine transfer tank for disposal into active tailing storage facility.

5.1.1.4.2 Flotation Reagents

Caustic

Caustic (50%) will be delivered in bulk containers and unloaded by the caustic unloading pump into the storage tank. From there, caustic is dosed to the chemical precipitation and flotation circuits.

Collector

Liquid collector in bulk containers will be unloaded by the collector unloading pump into isotainer storage tanks. Individual dosing pumps will be installed to dose reagent to the flotation circuit.

Flocculant

Flocculant will be loaded into the flocculant powder hopper. Flocculant will be mixed in batches by the package plant consisting of powder hopper, mixing head and mixing tank, transfer pump and storage tank. Individual dosing pumps will supply flocculant to the flotation tailings thickener, clarifier, tailings filter feed and concentrate filter feed.

Coagulant

Liquid coagulant will be dosed neat by individual dosing pumps to the flotation concentrate filter feed, flotation tails thickener, flotation tails filter feed.

5.1.1.5 Concentrate Dewatering

Concentrate recovered from the flotation cells is pumped to the two-stage concentrate dewatering cyclone clusters to produce underflow slurry for filtration feed. The dewatering cyclone underflow is stored in an agitated concentrate filer feed tank before pumping to the flotation concentrate belt filter. Filter cake is discharged onto a stacker conveyor and stockpiled in the existing concentrate stockyard. Filtrate from the filter is pumped to the concentrate dewatering

cyclone clusters. The cyclone overflow is pumped to the flotation tailings thickener. Flocculant and coagulant are added to assist with dewatering at the belt filter.

5.1.1.6 Tailings

The flotation tails, deslime cyclone overflow, combined magnetics, concentrate dewatering cyclone overflow and tailings filters filtrate from the new paste plant is thickened in the flotation tailings thickener. Thickener overflow gravitates to the flotation process water storage. The thickened underflow is pumped to the final tailings hopper. Final tailings combined with the DMS wet tailings is pumped from the final tailings hopper to an active wet tailings storage facility or tailings filtration facility located within the new Paste Plant (Section 5.2). The tailings pipeline is equipped with flow meter, density meter and pressure indicator to provide process control ensuring the pipeline operates to the designed pressure rating as well as detecting any potential leak.

There are sump pumps in the flotation area to recover any spillage back into the process.

Detail on the tailings characteristics is provided in Section 5.3.1.

5.1.1.7 Water Supply and Pre-Treatment

Raw water is sourced from the existing raw water storage pond (TN03). Raw water top-up into the DMS and flotation circuits will be treated through a chemical precipitation circuit. The reactive silica in the raw water is precipitated as solids using caustic soda. The chemical precipitation circuit consists of two agitated tanks in series.

The slurry from the chemical precipitation tanks is pumped to the clarifier, where the precipitate is removed via underflow into the final tailings hopper for disposal to an active TSF together with wet tailings from the DMS and flotation plant. The overflow discharges into a storage tank, where the treated raw water is distributed to the DMS and flotation circuits for use. Flocculant is added to the clarifier to promote settling.

There are sump pumps in the flotation area to recover any spillage back into the process.

5.1.1.8 Surface Water Management

Sump pumps will be positioned within the concrete bunded areas of the Flotation Plant, with all flows within the bunds contained and directed back into the processing plant.

All surface water runoff is diverted away from the Flotation Plant and to be contained in the sump pond or the Ghost Crab In-Pit TSF. The indicative perimeter surface water drainage alignment of the Flotation Plant is presented in **Figure 6.**

Figure 6: Indicative Perimeter Surface Water Drainage of the Flotation Plant

5.1.2 Project Timeline

An indicative schedule for the Flotation Plant is provided in **Table 6**. An Environmental Commissioning Plan for the Flotation Plant is provided as Appendix C.

Table 6: Flotation Plant Indicative Schedule

Task	Indicative Start Date	Indicative End Date
Construction Earthworks	July-26	Oct-26
Construction Steelworks	Sept-26	June-27
Commissioning and Ramp up	Oct-27	June-28
Production at Design Capacity	June-28	Ongoing

5.2 PASTE PLANT

5.2.1 Design

5.2.1.1 Tailings Transfer Pipeline

A combined wet tailings stream from the DMS and Flotation Plant will be pumped to the Paste Plant area. Two options for the pipeline route are presented in **Figure 7**. The final pipeline route will be finalised as part of the detailed engineering design with consideration of operational factors including traffic management, active mining areas and available area on the ground. The final pipeline route will be presented in the construction report upon completion. It is requested that both alignments are assessed under this application.

Pipeline containment controls include:

- All pipelines will be constructed as per Australian standard.
- Tailings pipeline will be contained within appropriately sized bunds, with any potential leaks contained.
- Pipelines will be inspected on regular basis.
- Isolation valves, leak detection system, and flow meters are to be maintained to manufacturers specifications.
- Periodic replacement of pipeline bends.

Figure 7: Map of Indicative Tailings Transfer Pipeline Route to Paste Plant

5.2.1.1.1 Tailings Filtration

Wet tailings transferred from the Processing Plant to the Paste Plant is stored in an agitated filter feed tank that feeds the tailings belt filters.

The tailings filter water return hopper, collecting the belt filtrate and other area clean up water (nominally belt filter vacuum box seal water and cloth wash water), will pump back to the flotation tailings thickener.

There is a sump pump in the tailings filtration area to recover any spillage to the tailings filter water return hopper.

5.2.1.1.2 Paste Mixer

The tailings filter cake will be conveyed into the paste mixer. Alternatively, if the filter plant is offline, dry tailings will be reclaimed from the stockpile via a FEL into separate feed hoppers before being conveyed into the paste plant mixer. Cement binder and lime will be added along with sufficient water to develop a paste product suitable for underground backfill.

The paste product will then be directed underground via reticulated pipes to fill mining voids.

The proposed layout of the Paste Plant and operational area is presented in **Figure 7** and **Figure 8**.

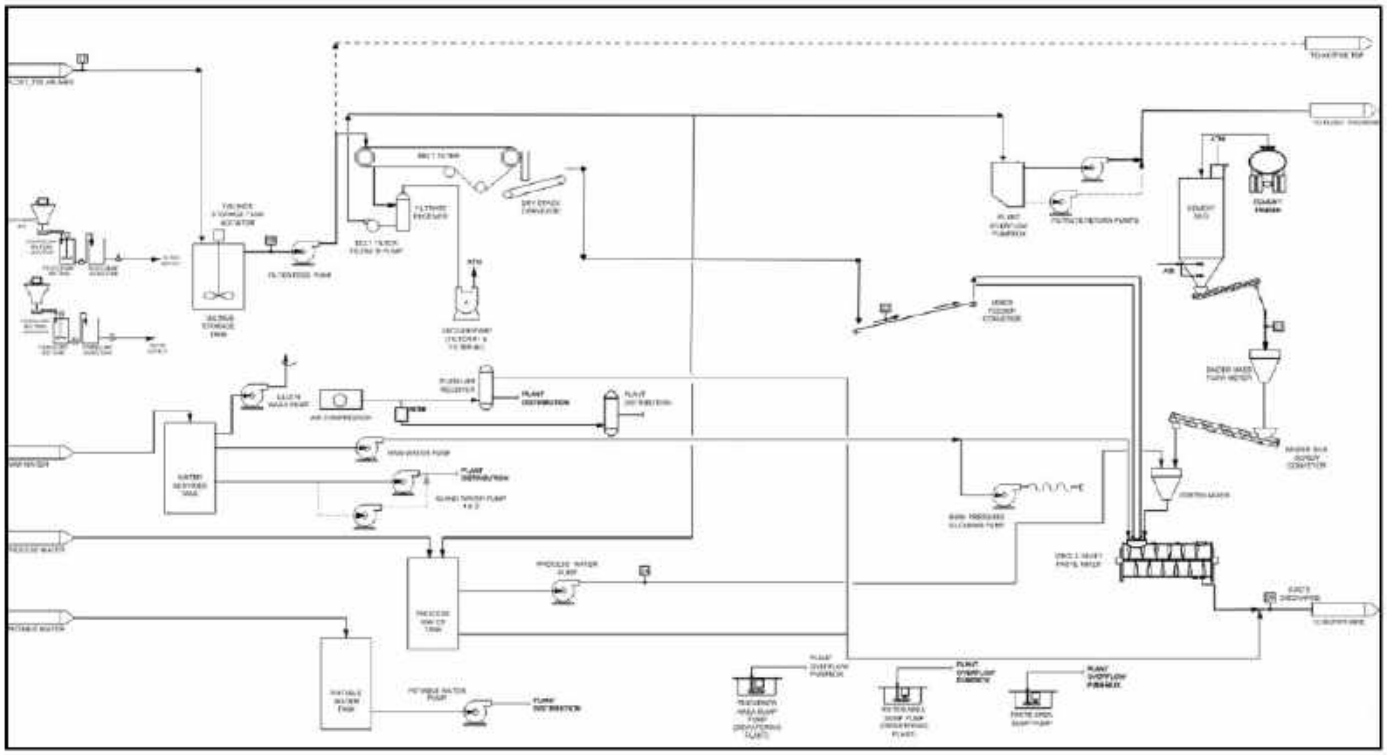

Figure 8: Indicative Paste Plant Arrangement

5.2.2 Project Timeline

The timeline for the design, construction and commissioning schedule for the Paste Plant including the ramp up to design capacity is summarised below **(Table 7)**.

Table 7: Paste Plant Indicative Schedule

Task	Indicative Start Date	Indicative End Date
Construction Earthworks	Oct-26	Dec-26
Construction Steelworks	Jan-26	Oct-27
Commissioning	Oct-27	Dec-27
Ongoing Operations	Jan-28	Ongoing

5.2.3 Surface Water Management

The Paste plant area is predominantly affected by the local rainfall; any minor surface water runoff is to be managed into a sump pond or the existing drainage.

5.2.4 Power Supply

The current primary source of power generation for the Project is the Power Grid, supplemented with diesel generators during emergency scenarios. Fuel storage for diesel generators is currently approved under Prescribed Premises Category 73 of Part V Licence L9037/2017/1 with production capacity of 884 kL Diesel.

Construction, commissioning and operation of the Flotation Plant will continue to derive power primarily from the Power Grid.

The Paste Plant will derive power primarily from diesel power generation, with an on-site estimated aggregate capacity of up to 7MW at operational maximum. This is below the Category 52 Electric Power Generation capacity of 10 MW in aggregate and is therefore not required as a Prescribed Premises category for this Application.

5.3 EMISSIONS

5.3.1 Tailings and RO Brine

A tailings materials characterisation program was undertaken to determine the geotechnical and geochemical properties of the flotation tailings. The testing completed by ALS Environmental laboratory as part of the program identified minor differences between the current and new tailings. These included slightly finer gradation, marginally higher fines content and likely subsequent minor variations in settlement and permeability behaviour of the flotation tailings. The risk of acid and metalliferous drainage from the flotation tailings is expected to be low and present and overall similar profile to the existing tailings streams at Mt Marion.

The differences are not considered significant in terms of overall tailings performance and will be effectively managed through ongoing operational planning and deposition strategy. The current controls in place for tailings management will sufficiently mitigate potential impacts of tailings transportation due to the similarity in geotechnical and geochemical properties. The tailings volumes expected at 3.5 Mtpa peak processing capacity are provided in **Table 8**.

Table 8: Tailings output with flotation and paste plant operation - processing 3.5 Mtpa

Description	Existing	With Flotation Plant Online	With Flotation and Paste Plant Online	Disposal Method
Wet Tailings (dry Mt / annum)	0.77 – 0.98	1.2 – 1.25	0.33 – 0.86	Pumped to active tailing storage facility
Dry Tailings (dry Mt / annum)	0.88 – 1.68	1.4 – 1.7	1.4 – 1.7	Waste Dump
Tailings into Paste (dry Mt / annum)	-	-	0.36 – 0.92	Underground Backfill
RO Brine (ML / annum)	-	383	466	Pumped to active tailing storage facility

5.3.2 Dust Emissions

Dust emissions will be monitored and managed through the Mt Marion Dust Management Plan as per Condition 5 of L9037/2017/1. Existing dust mitigation measures utilised on mobile and stationary plant equipment on site will be implemented to ensure that potential dust impacts are minimised.

5.3.3 Noise Emissions

Additional sources of noise during construction, commissioning and operation of the Flotation Plant and the Paste Plant are not anticipated to materially change existing noise levels from the Project.

5.3.4 Combustion Emissions

The Flotation Plant will require an additional 10 MW of installed power with 6.5 MW of absorbed power. This will be provided through connection to the existing overhead power line infrastructure with existing diesel generation back-up installed for critical equipment.

The Tails Filter, Paste Plant and North Underground Infrastructure will require 9 MW installed and 7.1 MW absorbed, which will initially be via diesel generation located adjacent to the Paste Plant, with a plan to also connect to the overhead power line infrastructure to reduce energy costs.

5.4 WATER BALANCE

The overall water balance for the Processing Plant when the Flotation and Paste Plant are operational is presented in **Figure 9**.

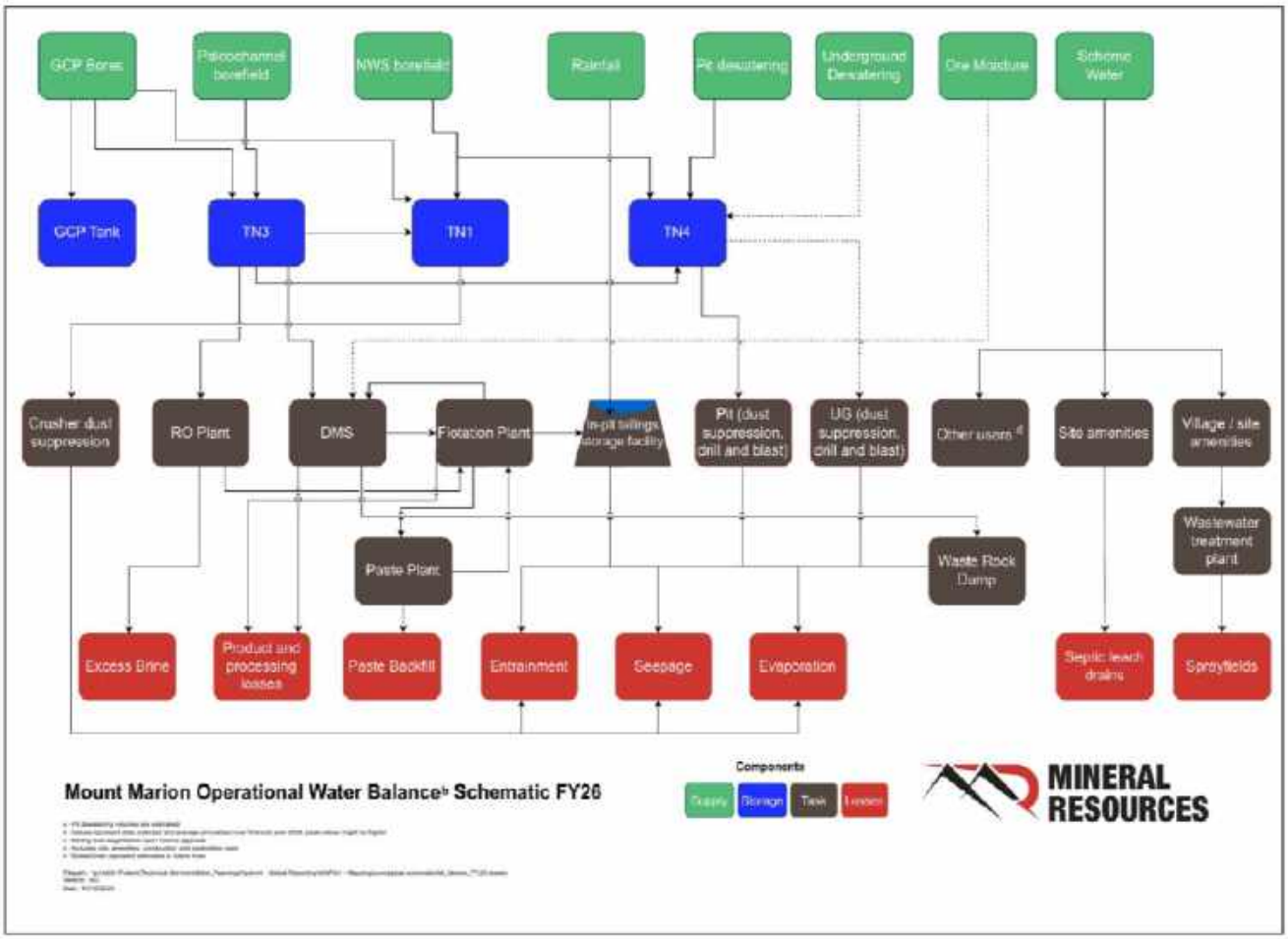

Figure 9: Site Water Schematic with Flotation and Paste Plants Operational

5.5 POWER REQUIREMENTS

The existing 33 kV overhead line on the Power electricity grid at Mount Marion is rated for 16.2 MW and is capable of supplying the forecast plant for the existing crushing plant, existing DMS plant and the new Flotation Plant (Section 5.1). In the event the electricity grid has a power outage that impacts the Project, backup power for emergency situations will be provided by the diesel generators. The sites power demands are presented in **Table 9** and **Table 10.**

To meet power demands for the operation of the current operations, the North Pit underground mine (approved under the Mining Act [DMPE Registration ID 129825]), and the proposed Tailings Filter Plant and Paste Plant including underground north infrastructure under this approval will be powered by 8 diesel generators (8 MW).

Table 9: Mt Marion Infrastructure Power Requirement - Grid

Plant	Peak Load (MW)
Existing Crushing, Camp & Admin	2.0
Crusher Upgrade	1.1
Existing DMS Circuit	6.0
New Fines Flotation	6.5
Total Power Requirement	**15.6**

Table 10: Mt Marion Infrastructure Power Requirement - Diesel

Plant	Peak Load (MW)
Tailings Filter Plant and Paste Plant - North	2.62
Underground North (U/G services, Surface Infrastructure)	4.47
Total Power Requirement	**7.09**

It is noted that while the total power generation capacity of diesel generators on site exceeds the 10 MW design capacity limit for Category 52: Electric power generation, the use of the diesel generators for emergency purposes does not warrant the inclusion of this Category under the Projects EP Act Part V Licence or Works Approval, as per the *Environmental Protection Regulations 1987*. Should continuous operations of greater than or equal to 10 MW in aggregate for the Project using diesel (or other fuels excluding natural gas) be met, approval under EP Act Part V will be sought.

6. CONSULTATION

6.1 STAKEHOLDER ENGAGEMENT

MinRes recognises the value of building positive relationships with key stakeholders and the communities in which it is active. A Stakeholder Engagement Plan is developed and implemented for each project undertaken by MinRes. Stakeholder engagement is ongoing and part of the larger Project. The key stakeholders identified as relevant to this project is outlined in **Table 11.**

Table 11: Stakeholders for the Project

Stakeholder
Australian Government Agencies
Department of Agriculture Water and the Environment
Western Australian Government Agencies
Department Biodiversity, Conservation and Attractions
Department of Mines, Industry Regulation and Safety
Department of Planning, Lands and Heritage
Department of the Premier and Cabinet (Minister for Water and Environment)
Department of Water and Environmental Regulation
Department of Water and Environmental Regulation – Environmental Protection Authority Services
Environmental Protection Authority
Local Government Agencies
Shire of Coolgardie
Traditional Owners
Marlinyu Ghoorlie Aboriginal People
Pastoralists
Woolibar Station

6.2 STAKEHOLDER ENGAGEMENT PROCESS

MinRes' objective for stakeholder consultation in relation to its operations is to ensure that all identified stakeholders, who may be affected by implementation of our projects have been appropriately consulted, and that their input has been considered with respect to key operational aspects.

MinRes has established a presence within the communities surrounding our Mt Marion operation through various community investment and engagement initiatives. MinRes recognises that effective stakeholder consultation is an integral component of its planning, assessment, and development processes to support the Company's various ongoing operations through to mine closure. Recognising the importance of stakeholder engagement, MinRes has a dedicated Communities and Stakeholder Engagement team that facilitates the Company's engagement with local communities, pastoralists, private landowners, Traditional Owner groups and local

government as part of tenement applications, regulatory approval processes and ongoing operations.

In addition to formal stakeholder engagement forums (via media such as meetings, telephone calls and/or written correspondence), MinRes has developed a Stakeholder Engagement Management Plan to assist with guiding effective engagement with local communities, government and other key stakeholders on environmental, land access, heritage and community matters during all phases of the Company's operations.

6.3 ONGOING ENGAGEMENT

A targeted stakeholder engagement consultation approach is undertaken by MinRes, involving meetings and telephone calls with stakeholders. The outcomes of these discussions are summarised in Appendix B.

7. INDEX OF SURVEYS FOR ASSESSMENT

No clearing is proposed under this Works Approval application, as the proposed footprints are within the Projects existing disturbance.

For information relating to previous biological surveys, refer to previous applications under L9037/2017/1.

8. SITING AND LOCATION

The Project area is located within the Goldfields region of WA between Coolgardie and Kambalda (**Figure 1**), and within the Coolgardie Botanical District of the Southwestern Interzone. The landscape in this region is gently undulating consisting of a deeply weathered surface, dry creeks, and low hills with areas of low elevation consisting of salt lakes and dunes.

8.1 SENSITIVE RECEPTORS AND ENVIRONMENTALLY SENSITIVE AREAS

Sensitive land uses and environmentally sensitive receptors identified near the premises are presented below. The location/s of sensitive land uses and receptors with respect to the premises is/are shown in the following figures:

- **Figure 10**: Map of Aboriginal Heritage Lodges and Registered Places
- **Figure 11**: Map of Pastoral Stations
- **Figure 12**: Map of Regional Water Bodies and Reserves
- **Figure 13**: Map of Conservation Significant Flora and Fauna Records

There are no sensitive land use areas within 20 km of the proposed Prescribed Premises boundary. The nearest sensitive premises is the Woolibar station, approximately 20 km to the southeast of the Premises boundary. The predominant land use in the area is for pastoral purposes (cattle grazing) and mineral exploration. Summary of environmental siting of nearby receptors is within **Table 12.**

Table 12: Environmental Siting of Nearby Sensitive Land Uses and Receptors

Type/Classification	Description	Distance from Premises	Context
Residential and Sensitive Land Uses			
Aboriginal and other heritage sites	Native Title Group with interests over the Premises area.	The following four DPLH Registered Sites are located within the proposed licence amendment area; • ID 37161 • ID 37162 • ID 37163 • ID 18370 All four of these DPLH Registered Sites have been salvaged under Section 18 consent. The following three DPLH Lodged Places are located within the proposed licence amendment area; • ID 18372 • ID 18595 • ID 40857 Where possible these Lodged Places will be avoided by the proposed works. If the Places cannot be avoided, MinRes in consultation with the Marlinyu Ghoorlie Native Title Claimants will seek appropriate approvals under the AHA prior to any impacts to the Places.	Heritage surveys (archaeological and ethnographic) over the entirety of the licence amendment area. To ensure compliance with the Aboriginal Heritage Act 1972 (AHA) MinRes conducts both archaeological and ethnographic surveys and consultation prior to the commencement of any ground disturbing works. In line with MinRes' obligations under the AHA, all sites recorded during heritage surveys will be avoided, unless the appropriate heritage approvals are obtained under the AHA. A search of the Department of Planning, Lands, and Heritage (DPLH) Aboriginal Cultural Heritage Inquiry System (ACHIS) completed 10 September 2025 identified four DPLH Registered Sites (ID 37161, ID 37162, ID 37163, and ID 18370) and three DPLH Lodged Places (ID 18372, ID 18595, and ID 40857) within the proposed licence amendment area. The proposed licence amendment area sits partially within previously approved Section 18 land (consent references 69-15688 granted 2019, and 69-07194 granted 2018. Under these Section 18 consents the four DPLH Registered Sites within the proposed licence amendment area were salvaged by an archaeological consultant with the participation of Traditional Owners over two trips (one in 2018 and one in 2019). Where any heritage sites or places which have not been subject to salvage under Section 18 consent are identified within the proposed licence amendment area, the Places will be avoided where possible. If the Places cannot be avoided, MinRes in consultation with the Marlinyu Ghoorlie Native Title Claimants will seek appropriate approvals under the AHA prior to any impacts to the Places.
Pastoral Leases and Stations	Pastoral leases over Crown land which give the lessee the right to graze authorised livestock on the natural vegetation (DPLH, 2025).	Woolibar Pastoral Lease underlies the Premises boundary and is therefore the closest pastoral lease to the premise. Woolibar Homestead is approximately 20 km east of the premises boundary.	Separation distance from the proposed prescribed premises boundary to Woolibar Homestead is approximately 20 km and east of the Goldfields Highway, south-east of the Jubilee Mine. The locations of the pastoral stations are displayed in **Figure 11**
Rural Residential Developments	N/A	No rural residential developments within the Prescribed Premises boundary or within proximity to the site.	N/A

Type/Classification	Description	Distance from Premises	Context
Specified Ecosystems			
Threatened Ecological Communities (TEC) and Priority Ecological Communities (PEC)	Locations of threatened ecologically communities protected under the *Biodiversity Conservation Act 2016* and priority ecological communities that require further survey (DBCA, 2024).	No TECs or PECs occur within the Prescribed Premises Boundary. The nearest mapped PEC is approximately 63 km to the east of the Prescribed Premises Boundary, being the Mount Belches *Acacia quadrimarginea/Ptilotus obovatus* (banded ironstone formation) (DBCA, 2024).	EPBC and DBCA database searches indicate that there is no known PEC or TEC within, or in proximity to, the Prescribed Premises Boundary. This was additionally confirmed during the recent Spectrum Ecology Flora and Vegetation surveys (Spectrum Ecology, 2024).
Important Wetlands – Western Australia	Western Australian wetlands cited in the "A Directory of Important Wetlands in Australia" Third Edition (EA, 2001), plus various additions for wetlands listed after 2001 (DBCA, 2018).	No Important Wetlands (Western Australia) are located within or in proximity to, the prescribed premises boundary. The closest water body to the Prescribed Premises Boundary is Lake Lefroy, approximately 20 km south-east of the site.	There are no important wetlands located within the proposed Prescribed Premises Boundary. Locations of wetlands in the vicinity of the site are presented in **Figure 12**.
Ramsar Sites in Western Australia	Boundaries of current and proposed Western Australia Ramsar wetlands listed as Wetlands of International Importance, under the Ramsar Convention (DBCA, 2017).	No Ramsar sites within the prescribed premises boundary.	N/A
Department of Conservation and Biodiversity (DBCA) Legislated Lands and Waters	All lands and waters defined under acts which are applicable to DBCA. These include the CALM Act 1984, Swan and Canning Rivers Management Act 2006 and lands identified under the Land Administration Act 1997 such as Crown reserve vested in Botanical Gardens and Parks,	No DBCA legislated lands or waters intersect the prescribed premises boundary. As illustrated in **Figure 12** the closest DBCA managed lands are located approximately 5 km to the west of the Premises Boundary – Yallari Timber Reserve.	No DBCA managed lands within the prescribed premises footprint. The locations of DBCA managed lands in proximity to the Project are presented in **Figure 12**

Type/Classification	Description	Distance from Premises	Context
	Crown reserve vested in the Zoological Gardens Board and Crown reserve vested in the Rottnest Island Authority (DBCA, 2025).		
Biological Component			
Conservation Significant Flora	Threatened flora protected under the *Biodiversity Conservation Act 2016* and priority flora that require further survey (DBCA, 2025).	No Threatened flora recorded within the prescribed premises boundary. No declared rare flora or threatened flora species have been identified within the Premises boundary during flora and vegetation surveys. The below priority flora has been recorded within the Prescribed Premises Boundary (Spectrum Ecology, 2024): • *Ricinocarpos digynus* (P1) • *Eucalyptus websteriana subsp. norsemanica/websteriana* (P1) • *Lepidosperma sp. Kambalda* (P2)	Note, *Eremophila acutifolia* has historically been recorded in the Prescribed Premises Boundary, previously P3, delisted from the DBCA threatened species database August 2024. Since no additional clearing risk from emissions from the Project is proposed under this application, risks to these species from the proposed activities is negligible.
Conservation Significant Fauna	Threatened fauna protected under the *Biodiversity Conservation Act 2016* and priority fauna that require further survey (DBCA, 2024).	Conservation significant fauna identified as relevant to the Project (SLR, 2024) are discussed individually for the following conservation significant species: • Malleefowl *(Leipoa ocellata)* • Arid Bronze Azure Butterfly *(ABAB) (Ogyris petrina)* • Inland Hairstreak Butterfly *(Jalmenus arlalus)* • Shield-backed trapdoor spider *(Idiosoma sp)*	Since no additional clearing risk from emissions from the Project is proposed under this application, risks to these species from the proposed activities is negligible.
	Malleefowl (*Leipoa ocellata*)	Since no additional clearing is proposed under this application, risks to this species is negligible.	Several malleefowl mounds have been identified within the Prescribed Premises boundary (Bamford, 2022).

Type/Classification	Description	Distance from Premises	Context
	Arid Bronze Azure Butterfly (ABAB) (*Ogyris petrina*)	Host ant species *Camponotus sp. nr. terebrans* colonies have been ground-truthed during SLR Consulting (2024) targeted fauna surveys. The colonies have been identified more than 650 m west of the prescribed premises boundary.	Three known *Camponotus sp. nr. terebrans* colonies have been identified west and south of the existing prescribed premises boundary.
	Inland Hairstreak Butterfly (*Jalmenus aridus*)	Mutualist ant species (*Froggattella kirbii*) and host plant (*Acacia tetragonophylla*) were recorded within the Survey Area and surveys for the butterfly are ongoing. The taxon (Jalmenus aridus) has a high likelihood of presence within the Project Area due to the presence of suitable habitat of *Acacia tetragonophylla* for both the host ants *Froggattella kirbii* and the food source of the *Jalmenus aridus* larvae. Jalmenus aridus is likely to occur in five fauna habitats within the Project Area, including drainage line, eucalypt woodland, low hills and slopes, rocky hill and shrubland/heathland.	Known records of mutualistic ant species (*Froggattella kirbii*) were avoided as part of the mine planning design period.
	Shield-backed trapdoor spider (*Idiosoma sp*)	Known *Idiosoma sp.* populations occur 1km north-west of the prescribed premises boundary.	Known *Idiosoma sp.* populations occur north-west of the prescribed premises boundary, as identified and exclusion buffered within granted Native Vegetation Clearing Permit CPS9866/1 (outside of the prescribed premises boundary). Conservative conditions buffering the Idiosoma sp. locations were applied due to the range of one group within mygalomorph spiders being of conservation significance within the range of the site, from the *Idiosoma nigrum* complex. Further investigations undertaken by Bennelongia (2024) have further defined *Idiosoma sp.* populations via. Both morphological and genetic analysis, which was not originally completed and therefore initial surveys only defined individuals to *Idiosoma sp.* level. Bennelongia (2024) concluded that the identified populations are not part of the *Idiosoma nigrum* complex and are therefore, not shield-backed trapdoor spiders. An application to amend CPS9866/1 pre-clearance conditions relating to Idiosoma sp. has been submitted.
Groundwater Dependent Ecosystems	Aquatic, Terrestrial and Subterranean ecosystems (Bureau of Meteorology, 2025).	The pre-existing environment comprises saline groundwater at considerable depth below the water table. There are no identified groundwater dependent receptors in the area given the environmental, social and economic characteristics of the groundwater	N/A

Type/Classification	Description	Distance from Premises	Context
		catchment. As such impacts to groundwater during operations are expected to be minimal (EMM Consulting, 2019).	
Physical Component			
Public Drinking Water Source Areas (PDWSA)	Public drinking water source areas (PDWSAs) are surface water catchments and groundwater areas that provide drinking water to cities, towns and communities throughout the state (DWER, 2025).	There are no PDWA within or near the premises boundary.	N/A
Surface Water Management Area	The Surface Water Management Area dataset was developed in order to give a clear understanding of surface water availability and to provide management tools to make good water allocation and natural resources management decisions (DWER, 2018).	There are no surface water management areas within or near the premises boundary.	N/A
Major watercourses / water bodies	National Drainage Divisions and Basins dataset overseen by the Australian Water Resources Council (DWER, 2024). Major streamlines of WA, coded with a hierarchy and are named. The dataset includes many streams in addition to the detailed Hydrography in areas where its data is limited (DWER, 2018)	The permit area is located within the Lake Lefroy Catchment (Lefroy Dundas Sub Area) (Clarke, 1991). No major water bodies occur within the premises boundary. Lake Lefroy lies approximately 25 km to the southeast of the premises area, with the nearest water bodies located over 20km to the north of the premises (Lake Douglas, Lake Red and Lake Brown).	There are no important wetlands located within the proposed premises boundary. The location of Lake Lefroy in proximity to Mount Marion is displayed in **Figure 12**. The lake is located 25km from the premises boundary.

Type/Classification	Description	Distance from Premises	Context
Groundwater	Relevant site-specific groundwater details.	Depth to groundwater within the Premises area ranges from 8 – 60 m BGL. Depth to groundwater averages ~50 mbgl.	The Mt Marion Lithium Mine is within the Goldfields Groundwater Area, with groundwater encountered within the Paleochannel and Fractured Rock aquifers, with minor perched aquifers present within the shallow weathered basement and colluvial/alluvial formations. Groundwater within the Fractured Rock aquifer has been found to be either brackish or saline depending on location within the drainage catchment. Groundwater from the Paleochannel aquifer is acidic and saline, with an average pH of 3.8 and salinity of 36,400 mg/L. Groundwater from the Fractured Rock aquifer varies from brackish, with an average pH of 7.8 and salinity of 6,800 mg/L, to saline, with a pH of 7.00 and salinity of 44,000 mg/L. Groundwater is abstracted from the Paleochannel and Fractured Rock aquifers for use in dust suppression, mine activities and mineral processing. Only minor seepage from the Fractured Rock aquifer into open-cut pits occurs. Groundwater will continue to be monitored and utilised as per ongoing groundwater management in accordance with Groundwater licences GWL200665(4) and GWL174427(4).
Acid Sulfate Soils	Acid sulfate soil being soil which contains chemical compounds known as metal sulfides (Water Quality Australia, 2025)	There is no known occurrence of acid sulphate soil within or near the premises boundary.	N/A
Contaminated Sites – Reported Sites	The site has received a classification of possibly contaminated – investigation required (DWER, 2021).	A notice of classification has been received within the prescribed premises boundary (mining tenement M15/717).	On 30 September 2021, the DWER provided a notice of a Classification of a Known or Suspected Contaminated Site within tenement M15/717 and required further investigation in accordance with section 8.3.3 of "Identification, reporting and classification of contaminated sites in Western Australia". This site is known for previous activities with potential to cause soil contamination (e.g., bio-remediation area, vehicle washdown area, fuel storage facilities, landfills, and vehicle maintenance facilities). A contaminated site Preliminary Site Investigation (PSI) was conducted July 2023 (Senversa, 2023), which identified a number of Areas of Potential Environmental Concern (APEC). Prior to closure further assessments based on recommendation of the PSI will be conducted to prepare a contaminated sites action plan.

8.2 REGIONAL CLIMATE

The Goldfields region is characterised by hot summers and cool winters with low rainfall distributed throughout the year. Using meteorological data collected at Bureau of Meteorology (BoM) weather station at the Kalgoorlie- Boulder Airport (Site No. 12038), approximately 36 km north of the Project, January is the hottest month with a mean maximum temperature of 33.6°C. Temperatures more than 40°C can regularly be experienced during the summer months.

8.3 TOPOGRAPHY

The topography across the project area varies between 350 and 450 mAHD, with the site disturbance footprint straddling a ridge of high elevation. Runoff from the majority of the Project area flows to the southeast. The Project area is located within the Goldfields Groundwater Management Area, where the identified water resources are in shallow ephemeral lakes or unconfined aquifers and are generally saline or hypersaline.

8.4 GEOLOGY

Regionally, the Project is positioned within the greenstone and granitic rocks of the Yilgarn Craton (Rapallo 2010b). The local geology is dominated by two rock groupings – a mafic to ultramafic flow sequence and a pegmatite granodiorite sequence. Soils across the Goldfields are old, being Pre-Cambrian or Archaean in composition, and deeply weathered. Deep weathering in the soil profile has either partially or wholly removed large volumes of rock forming minerals to solution. Once in solution, these minerals have been transported in the groundwater systems and discharged into the many salt lakes typical of the region, or redeposited.

8.5 HYDROLOGY

The Project area is located within the Lake Lefroy Catchment (Lefroy Dundas Sub Area). The pre-existing surface water regime in the area is characterised by extensive paleo-alluvium and chains of playa (salt) lakes of low relief (Clark, 1991). Lake Lefroy (approximately 20 km south-east of the Project area) represents the ultimate receptor of surface water drainage from the project catchments and is a highly saline playa.

8.6 HYDROGEOLOGY

Aquifers in the Goldfields region comprise two principal types, a fractured rock aquifer of weathered and fractured bedrock, and the sedimentary aquifer of buried palaeochannels. The fractured rock aquifer comprises granitic and gneiss, pegmatite and dolerite dykes, mafic and ultramafic volcanic and metasedimentary rocks (greenstones). These rocks are of low primary porosity and permeability where saturated. In general, fractured rock aquifers tend to be limited aquifers with groundwater contained in localised, structurally controlled zones related to rock competence with limited storage capacity.

The palaeochannel comprises of a sequence of unconsolidated, medium to coarse quartz sands to clayey sands and gravels, known as the Woolibar Sandstone. The Woolibar Sandstone has both primary porosity and permeability and represents the best target for groundwater supply in the area. The unconsolidated sandstone is confined by the relatively impermeable, weathered Perkolili Shale, comprising a thick sequence of mottled, grey, red brown clay and minor sandy clay. The Woolibar Sandstone, and Goldfield's area palaeochannels, are postulated to act as a drainage system for the surrounding weathered and fractured rock basement.

The water table is below 100 m in depth in the northern part of the tenements and below 20-70 m in the southern areas. The Project's Woolibar borefield accesses the Woolibar Palaeochannel, which

is part of the greater Roe Palaeochannel system (Golder, 2019). The confined nature of the palaeochannel results in potentiometric head around 10 m below the natural surface in lower lying valley settings. Groundwater quality in the palaeochannel is of poor quality and hypersaline.

8.7 VEGETATION AND FLORA

Spectrum Ecology were engaged to complete a Detailed Flora and Vegetation survey in 2023, with primary field surveys occurring between September to October 2023, with supplementary surveys occurring April 2024. A total of 25 Vegetation groups were identified from the Spectrum (2024) survey. All vegetation groups are common and well represented through the Eastern Goldfields subregion. The vegetation community that dominates the Region is Eucalypt woodlands over mixed shrublands on broad loamy plains and low rises (Native Vegetation Solutions, 2019). This vegetation type is typical of the region and not considered to be unusually diverse.

No Threatened flora species pursuant to the EPBC Act and/or gazetted as Threatened pursuant to the BC Act were recorded during the survey.

Three priority species identified by Spectrum (2024), occur within the Project area:

- *Eucalyptus websteriana subsp. Norsemanica* (P1)
- *Lepidosperma sp. Kambalda (P2)*
- *Ricinocarpos digynus* (P1)

It should be noted that *Eremophila acutifolia* was previously identified within the Project Area, this species was previous listed as a Priority 3 species however was delisted from the DBCA threatened species register 13 August 2024.

8.8 TERRESTRIAL FAUNA AND HABITAT

SLR Consulting were commissioned in 2023 to complete a Detailed Fauna Assessment over the Mt Marion mining and exploration areas, along with targeted surveys for the below species:

- Malleefowl (*Leipoa ocellata*)
- Chuditch (*Dasyurus geoffroii*)
- Arid Bronze Azure Butterfly (ABAB) (*Ogyris subterretris petrina*).

The surveys were split into two report areas, covering a total of 30,391 ha:

- Mt Marion [redacted]
- Mt Marion – MinRes Tenements (SLR Consulting, 2024b) – 7,376 ha.

The objective of the survey was to identify key fauna values within the Survey Area as part of the environmental impact assessment process and to expand on the previous assessments, completed by Bamford Consulting.

Field surveys were complete over two field surveys through July – August 2023, with a total survey effort of 96-person field days. Following identification of colonies of the ABAB host ant species (Camponotus sp. nr. terebrans), an independent ABAB survey was conducted over five field survey (SLR Consulting, 2024c).

Nine habitat types were identified in the SLR Consulting 2024 Fauna Assessment. The habitats identified are typical of the Goldfields bioregion and consistent with habitats identified by previous studies in the region.

The below habitats are considered to have some significance in the region:

- Drainage Lines: highest value to significant fauna due to dense fringing shrubland, and higher foraging potential. Numerous shallow ephemeral pools provide valuable water sources for

significant species such as Malleefowl and Carnaby's Cockatoo. The Drainage Line habitats are valuable for their role as an ecological linkage.

- Rocky Outcrop and Rocky Hills: high value to a number of fauna species due to the caves and rock crevices found throughout the habitat. Numerous shallow ephemeral pools provide valuable water sources for Malleefowl, black cockatoos, mammal, and reptile species.
- Shrubland/Heathland: high value to Malleefowl and other large fauna species as a refuge from predators due to the density of vegetation. This habitat also provides valuable foraging resources.

It should be noted that although Eucalypt Woodland habitat is common and widespread throughout the Survey Area, the smooth-barked eucalypts that are within this habitat are the preferred trees for the Sugar Ant (*Camponotus sp. nr. terebrans*) – the host ant for the ABAB (*Ogyris subterretris petrina*).

8.9 ABORIGINAL HERITAGE

Heritage studies, including archaeological and ethnographic surveys, have been conducted in the project area since 1997. MinRes has avoided ACH identified within the project area, where possible, and managed ACH places as required under the *Aboriginal Heritage Act 1972* (AH Act). When not possible to avoid, MinRes has obtained the consent of the Minister under section 18 of the AH Act to disturb ACH places.

MinRes has been granted two S18 approvals under the AH Act to disturb five Aboriginal Heritage Places for the purposes of Lithium Mine Expansion and expansion of operations at Mount Marion. Management strategies for ACH places in the project area included the salvage and relocation of cultural heritage according to the conditions outlined by the Minister for Aboriginal Affairs.

Figure 10: Map of Aboriginal Heritage Lodges and Registered Places

Figure 11: Map of Pastoral Stations

Figure 12: Map of Regional Water Bodies and Reserves

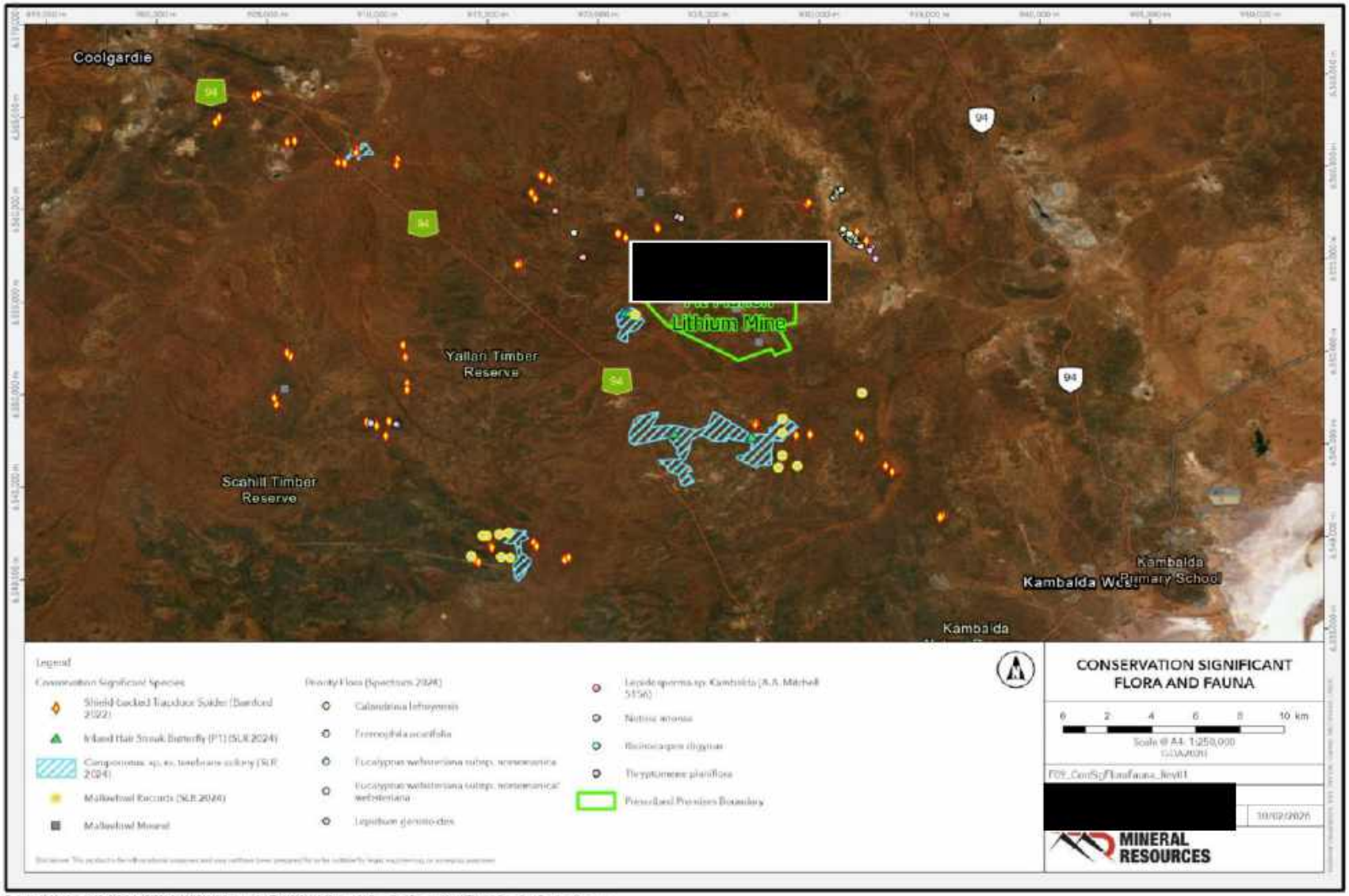

Figure 13: Map of Conservation Significant Flora and Fauna Records

9. RISK ASSESSMENT

9.1 LEGISLATION AND COMPLIANCE

Compliance with relevant legislation is summarised in **Table 13.**

Table 13: Legislation and Compliance Status

Legislation	Environmental Factor	Relevant Approval and Status
***Mining Act 1978* (WA) (Mining Act)** Projects involving mining, processing and associated activities that require approval and regulation under the Mining Act (WA).	Compliance with tenement conditions. Assessment of mining proposals and Mine Closure Plans (MCPs), now Mining Development Closure Proposals (MDCPs).	MinRes are committed to continue complying with all tenement conditions for the Project. A site-wide Mining Proposal and Mine Closure Plan associated with the activities described in this WAA has been approved (Reg ID: 129825).
***Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act)** Projects with the potential to have significant impacts upon Matters of National Environmental Significance require referral.	Assessment against Matters of National Environmental Significance (MNES).	The proposed Project does not have a significant impact on MNES and therefore is unlikely to trigger a requirement for referral under the EPBC Act.
***Environmental Protection Act 1986* (WA) (EP Act)** Part IV: Projects with the potential to have significant impacts on the environment require referral.	Key environmental factors assessed via Environmental Protection Authority (EPA) assessment under Part IV: • Flora and Vegetation. • Landforms. • Subterranean Fauna. • Terrestrial Environmental Quality. • Terrestrial Fauna. • Terrestrial Environmental Quality. • Inland Waters. • Air Quality. • Greenhouse Gas Emissions. • Social Surroundings. • Human Health. • Benthic Communities and Habitats • Coastal Processes • Marine Environmental Quality • Marine Fauna	The proposed Project does not have a significant impact on the EPA's key environmental factors and therefore is unlikely to trigger a requirement for referral under the Part IV of the EP Act.
***EP Act* (WA)** **Part V (Section 51): Clearing of Native Vegetation**	Assessment against the ten clearing principles: • Biological diversity. • Significant fauna habitat.	No additional clearing is required under this Works Approval Application.

Legislation	Environmental Factor	Relevant Approval and Status
Part V of the EP Act specifies that clearing of native vegetation in Western Australia needs a permit	• Rare flora. • Threatened Ecological Communities. • Remnant Vegetation. • Association with watercourse or wetland. • Land degradation. • Impact on a conservation area. • Impact surface or underground water quality. • Cause or exacerbate flooding.	
***EP Act* (WA)** **Part V (Section 52)** Establishes a range of statutory instruments to permit the assessment and management of environmental outcomes arising from emissions from industry by Department of Water and Environmental Regulation (DWER).	A Works Approval or Licence authorises work to be undertaken on Prescribed Premises which is likely to cause, increase, alter or result in a discharge of waste, emissions or noise, odour or electromagnetic radiation to the environment.	The Project has a current Licence (L9037/2017/1) authorising the following EP Act Schedule 1 activities: • Category 5: Processing or beneficiation of metallic and non-metallic ore • Category 6: Mine dewatering • Category 12: Screening etc. of material • Category 54: Sewage Facility, 100m^3 or more per day • Category 57: Used tyre storage (General) • Category 64: Class II putrescible landfill • Category 73: Bulk storage of chemicals etc. • Category 85B: Water desalination plant.
***Biodiversity Conservation Act 2016* (WA) (BC Act)** Provides protection for biodiversity, particularly threatened species and threatened ecological communities within Western Australia.	Threatened Flora, Fauna and Ecological Communities.	No flora, fauna or communities protected under the BC Act (WA) will be impacted by the WAA. Baseline studies have been completed by specialist contractors with the required licence to take flora or fauna for the purposes of biological assessment.
***Aboriginal Heritage Act 1972* (WA) (AH Act)** The AH Act provides protection to places and objects important to Aboriginal people of Western Australia.	Protection of Aboriginal heritage sites and matters.	Appropriate buffer provided to registered sites within the prescribed premises boundary.
***Native Title Act 1993* (Cth)**	Provides a national system for the recognition and protection of native title and for its co-existence with the national land management system. An Indigenous Land Use Agreements	Native Title registration exists for the Project area for the Marlinyu Ghoorlie (WAF647\2017).

Legislation	Environmental Factor	Relevant Approval and Status
	(ILUA) is a voluntary agreement between a native title group and others about the use of land and waters.	
Rights in Water and Irrigation Act 1914 (WA) (RIWI Act) Provides for the regulation, management, use and protection of water resources.	Groundwater licences are required to abstract groundwater for dewatering and water supply purposes within proclaimed groundwater areas. Water resources: The Project is located within the proclaimed Goldfields Groundwater Area.	There are currently licences under 5C and 26D of the RIWI Act, giving authority take water and to construct or alter wells. The 5C licences are GWL200665 and GWL174427 (palaeochannel and combined – fracture rock west – fractured rock aquifers, respectively). The 26D licences are currently CAW203977 and CAW203978, which have been renewed in January 2023 as CAW208289(1) and CAW208291(1) (palaeochannel and combined – fracture rock west – fractured rock aquifers, respectively).
Contaminated Sites Act 2003 (WA) (CS Act) Complements the EP Act and addresses contamination and legacy issues not regulated under the EP Act.	Requires that known or suspected contamination is reported to DWER where the substance is present at above background concentrations in the land or waters of a site that presents or potentially presents a risk of harm to human health, the environment or any environmental value.	A notice of classification of a known or suspected contaminated site given under section 15 of the CS Act has been received for the site on 20 September 2021. The site has been classified under Section 13 of the CS Act, based on information submitted to the DWER in March 2021.

9.2 DWER GUIDELINES

In 2015 and 2016, DWER released a series of guidelines that apply to Works Approvals, Licences and associated impact assessments. Guidelines that are of specific relevance to this Works Approval and Licence Application are listed in **Table 14.**

Table 14: Consideration of DWER Guidelines

Document Title	Description	Discussion
Guidance: Industry Regulation Guide to Licensing (June 2019).	Describes the assessment process for works approvals and licence applications.	Reviewed as part of the application preparation process.
Guidance Statement: Environmental Risk Assessment Framework (February 2017).	Establishes a risk assessment framework for assessment of Part V applications.	The risk assessment framework including definitions of likelihood and consequence provided in the Guidance Statement has been utilised as an impact assessment tool for this application.
Guidance Statement: Environmental Siting (November 2016).	Provides guidance to environmental siting to inform the risk assessment of activities	No Threatened or Priority flora will be impacted by the Project.

Document Title	Description	Discussion
	carried out on the prescribed premise. Environmental siting is the consideration of a prescribed premises in relation to sensitive and high value ecosystems.	There are no public drinking water supply areas within the Project footprint. There are no Ramsar wetlands within the Project footprint.

9.3 CONTROL OF EMISSIONS

9.3.1 Risk Assessment Overview

A risk assessment was completed in accordance with the DWER *Guidance Statement: Environmental Risk Assessment Framework* (February 2017). The risk assessment process identified:

- The sources of pollution and where available, quantification of emissions
- The pathway which pollution follows from the source to the receptor
- The environmental and health receptors
- The potential impacts on the receptors from this source of pollution
- The project specific controls and mitigation measures which will be applied to the Project
- The likelihood, consequence and overall risk rating associated with this factor
- The requirement for monitoring.

Likelihood and consequence categories were derived from the DWER Guidance Statement (DWER, 2017) and are provided in the Risk Criteria in **Table 15.** The associated risk matrix is presented in **Table 16.**

Table 15: Risk likelihood and consequence criteria

Likelihood			Consequence	
			Environment	Public Health and Amenity (such as air and water quality, noise and odour)
Almost Certain	The risk event is expected to occur in most circumstances	**Severe**	Onsite impacts: catastrophic Offsite impacts local scale: high level or above Offsite impacts wider scale: mid-level or above Mid to long-term or permanent impact to an area of high conservation value or special significance^ Specific Consequence Criteria (for environment) are significantly exceeded	Loss of life Adverse health effects: high level or ongoing medical treatment Specific Consequence Criteria (for public health) are significantly exceeded Local scale impacts: permanent loss of amenity
Likely	The risk event will probably occur in most circumstances	**Major**	Onsite impacts: high level Offsite impacts local scale: mid-level Offsite impacts wider scale: low level Short-term impact to an area of high conservation value or special significance^	Adverse health effects: mid-level or frequent medical treatment Specific Consequence Criteria (for public health) are exceeded Local scale impacts: high level impact to amenity

Likelihood			Consequence	
			Environment	Public Health and Amenity (such as air and water quality, noise and odour)
			Specific Consequence Criteria (for environment) are exceeded	
Possible	The risk event could occur at some time	**Moderate**	Onsite impacts: mid-level Offsite impacts local scale: low level Offsite impacts wider scale: minimal Specific Consequence Criteria (for environment) are at risk of not being met	Adverse health effects: low level or occasional medical treatment Specific Consequence Criteria (for public health) are at risk of not being met Local scale impacts: mid-level impact to amenity
Unlikely	The risk event will probably not occur in most circumstances	**Minor**	Onsite impacts: low level Offsite impacts local scale: minimal Offsite impacts wider scale: not detectable Specific Consequence Criteria (for environment) likely to be met	Specific Consequence Criteria (for public health) are likely to be met Local scale impacts: low level impact to amenity
Rare	The risk event may only occur in exceptional circumstances	**Slight**	Onsite impact: minimal Specific Consequence Criteria (for environment) met	Local scale: minimal impacts to amenity Specific Consequence Criteria (for public health) criteria met

Notes: ^ For areas of high conservation value or special significance, the *Guideline: Environmental siting* has been considered

*In applying public health criteria, the Department of Health's *Health risk assessment (scoping guidelines)* have been considered

'Onsite' means within the prescribed premises boundary

Table 16: Risk 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

Key sensitive receptors within the vicinity of the Project include:

- Flora, fauna and vegetation
- Groundwater and surface water systems.
- Underlying soils.

- Accommodation Village
- Employees and contractors on the operational mine site.

9.4 RISKS AND IMPACTS ASSESSMENT

Potential impacts, control measures and risk evaluation associated with the proposal is detailed in **Table 17**.

Table 17: Risk Assessment for Works Approval Application

Risk Event						Controls and Mitigating	Residual Risk		
Source	Activities	Potential Emission	Potential Receptor	Potential Pathway	Potential Adverse Impact		Likelihood	Consequence	Risk
Construction of Flotation Plant and Paste Plant									
Category 5: Processing or Beneficiation of metallic and non-metallic ore	Construction activities, earthworks and vehicular movements.	Dust: Release of particulate matter from activities.	Native flora vegetation	Air/windborne pathway	Degradation of vegetation condition. Degradation of fauna habitat	• A Land Activity Permit will be implemented to ensure all works are compliant with regulatory requirements and are within approved boundary • Vehicles and equipment shall be restricted to designated roads and tracks • Speed limits shall apply on unsealed roads • Dust suppression via water carts.	Unlikely	Slight	Low
	Equipment, machinery and vehicles used during construction works	Noise	Native fauna in areas surrounding the flotation plant and paste plant	Air/windborne pathway	Noise and vibration disrupting of natural foraging and breeding behaviours of fauna.	• Placement of infrastructure not in any habitat of high significance • Development area already subject to plant operational and truck loading noise • Demarcate areas that may not be entered by personnel and/or machinery • A Land Activity Permit will be implemented to ensure all works are compliant with regulatory requirements and are within approved boundary • Noise standard controls including ensuring all relevant plant and machinery with	Unlikely	Minor	Medium

Risk Event						Controls and Mitigating	Residual Risk		
						noise dampening equipment is maintained • Regular inspection and maintenance of vehicles and equipment shall be undertaken			

	Spills and leaks from earth moving activities.	Contamination: Stormwater containing hydrocarbons	Flora and vegetation
			Topsoil
			Surface water and/or groundwater
				Ground	Contamination of soils, surface water and/or groundwater with hydrocarbons	• Duration of construction activities is relatively short term (<12 months)
						• Construction will be managed under the CEMP:
						  • Avoid fuel/chemical storage and transfer from occurring outside of designated areas
						  • Avoid off-road driving and stay on approved access tracks and roads
						  • Implement surface and groundwater management strategies in accordance with the GWOS
						  • Implement the Project EMS to minimise spillage and environmental contamination from handling, storage and processing of materials
						  • Spill response training shall be delivered to all personnel as part of the induction process
						  • Hydrocarbons will be managed to avoid leaks and spills through the use of bunds, location of bunded areas being either
							Unlikely	Minor	Medium

Risk Event						Controls and Mitigating	Residual Risk		
						outside floodplains or appropriately elevated to avoid the risk of inundation • Maintain high standard of housekeeping around Prescribed Premises • Treat and dispose of all domestic wastewater/wastewater effluent appropriately • Where spills occur outside bunded areas, remediation will occur immediately to avoid contamination of surface and groundwater.			
Commissioning and Operation of Flotation Plant and Paste Plant									
Category 5: Processing or Beneficiation of metallic and non metallic ore	Operation of Flotation Plant and Paste Plant and equipment movements.	Dust: Release of particulate matter from activities.	Native flora and vegetation	Air/windborne pathway	Reduced health and viability of flora and vegetation Human amenity	• A Land Activity Permit will be implemented to ensure all works are compliant with regulatory requirements and are within approved boundary • Vehicles and equipment shall be restricted to designated roads and tracks. • Speed limits shall apply on unsealed roads. • Dust suppression via water carts.	Unlikely	Slight	Low
	Equipment, machinery and vehicle use	Noise	Native fauna in areas surrounding the Flotation Plant and Paste Plant	Air/windborne pathway	Noise and vibration disrupting natural foraging and breeding behaviours of fauna Human amenity	• Placement of infrastructure not in any habitat of high significance • Development area already subject to plant operational and truck loading noise	Unlikely	Minor	**Medium**

Risk Event						Controls and Mitigating	Residual Risk		
						• Demarcate areas that may not be entered by personnel and/or machinery • A Land Activity Permit will be implemented to ensure all works are compliant with regulatory requirements and are within approved boundary • Noise standard controls including ensuring all relevant plant and machinery with noise dampening equipment is maintained • Regular inspection and maintenance of vehicles and equipment shall be undertaken			
	Leaks and overflows	Contamination: Stormwater containing hydrocarbons, chemicals concentrate and sediment from leaks and overflows	Flora and vegetation Surface water and/or groundwater	Direct discharge and point of flow	Potentially contaminated surface water runoff to the surrounding environment leading to surface water and groundwater contamination.	• Flotation Plant hardstand area directs surface water via drains and sumps to the Ghost Crab TSF • Process water pond to receive and recycle water • All hydrocarbons and dangerous goods on site will be stored and handled according to the applicable sections of the *Dangerous Goods Safety Act 2004*, *Dangerous Goods Safety (Storage and Handling of Non-Explosives) Regulations 2007* and *Dangerous Goods Safety (Explosives) Regulations 2007* • Chemical storage areas are bunded with a containment capacity equivalent to 110% of the capacity of any tank and 25% of the total capacity of an interlinked system	Possible	Slight	Low

Risk Event						Controls and Mitigating	Residual Risk		
						• Culverts and floodways along access roads will maintain existing flood characteristics and maintain natural flow volumes • Regular inspection of bunded areas to ensure capacity is maintained. • Spillages will be cleaned up and disposed of as per appropriate MSDS, relevant environmental and safety guidelines and the site environmental procedure.			
	Delivery of tailings from flotation plant to TSF or Paste Plant	Loss of tailings	Underlaying soils Surface and/or groundwater Flora and vegetation Native fauna habitat	Burst or leak pipe	Soil contamination Contamination of surface water and groundwater systems Degradation in the health of vegetation and fauna habitat	• All pipelines will be constructed in accordance as per Australian standard. • Tailings pipeline will be contained within appropriately sized bunds, with any potential leaks contained • Tailings pipelines will be inspected on a daily basis • Isolation valves and flow meters are to be maintained to manufacturers specifications • Periodic replacement of pipeline bends.	Possible	Moderate	**Medium**
						•			

10. APPLICATION FEE CALCULATION

Table 18: Application Fee Calculation

Cost of Works ($)	Fee units	Current fee ($ per unit)	Proposed fee ($ total)

11. REFERENCES

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APPENDIX A
PROOF OF OCCUPIER STATUS

ASIC
Australian Securities & Investments Commission

Current & Historical Company Extract

EXTRACT

Name: MT MARION LITHIUM MANAGEMENT PTY LTD
ACN: 666 116 365

Date/Time: 06 January 2025 AEST 04:22:16 PM

This extract contains information derived from the Australian Securities and Investments Commission's (ASIC) database under section 1274A of the Corporations Act 2001.

Please advise ASIC of any error or omission which you may identify.

Organisation Details		Document Number
Current Organisation Details		
Name:	MT MARION LITHIUM MANAGEMENT PTY LTD	3EVK65886
ACN:	666 116 365	
ABN:	25666116365	
Registered in:	Western Australia	
Registration date:	28/02/2023	
Next review date:	28/02/2025	
Name start date:	28/02/2023	
Status:	Registered	
Company type:	Australian Proprietary Company	
Class:	Limited By Shares	
Subclass:	Proprietary Company	

Address Details		Document Number
Current		
Registered address:	20 Walters Drive, OSBORNE PARK WA 6017	3EVK65886
Start date:	28/02/2023	
Principal Place Of Business address:	20 Walters Drive, OSBORNE PARK WA 6017	3EVK65886
Start date:	28/02/2023	

[redacted]

Share Information

Share Structure

Class	Description	Number issued	Total amount paid	Total amount unpaid	Document number
ORD	ORDINARY	100	100.00	0.00	3EVK65886

Members

Note: For each class of shares issued by a proprietary company, ASIC records the details of the top twenty members of the class (based on shareholdings). The details of any other members holding the same number of shares as the twentieth ranked member will also be recorded by ASIC on the database. Where available, historical records show that a member has ceased to be ranked amongst the top twenty members. This may, but does not necessarily mean, that they have ceased to be a member of the company.

Name: MT MARION HOLDINGS PTY LTD
ACN: 666 115 742
Address: 20 Walters Drive, OSBORNE PARK WA 6017

Class	Number held	Beneficially held	Paid	Document number
ORD	100	yes	FULLY	3EVK65886

Documents

Note: Where no Date Processed is shown, the document in question has not been processed. In these instances care should be taken in using information that may be updated by the document when it is processed. Where the Date Processed is shown but there is a zero under No Pages, the document has been processed but a copy is not yet available.

Date received	Form type	Date processed	Number of pages	Effective date	Document number
28/02/2023	201C Application For Registration As A Proprietary Company	28/02/2023	3	28/02/2023	3EVK65886
03/07/2023	351 Deed Relating To Class	18/07/2023	40	03/07/2023	031768185

	Order				
22/02/2024	484E Change To Company Details Appointment Or Cessation Of A Company Officeholder	22/02/2024	2	22/02/2024	7ECO94881
18/04/2024	484E Change To Company Details Appointment Or Cessation Of A Company Officeholder	18/04/2024	2	18/04/2024	7ECR28436
06/12/2024	484E Change To Company Details Appointment Or Cessation Of A Company Officeholder	06/12/2024	2	06/12/2024	7EDD64044

*****End of Extract of 3 Pages*****

ASIC
Australian Securities & Investments Commission

Current Company Extract

Name: A.C.N. 665 883 509 PTY LTD
ACN: 665 883 509

Date/Time: 26 November 2024 AEST 06:19:35 PM

This extract contains information derived from the Australian Securities and Investments Commission's (ASIC) database under section 1274A of the Corporations Act 2001.

Please advise ASIC of any error or omission which you may identify.

EXTRACT

Organisation Details		Document Number
Current Organisation Details		
Name:	A.C.N. 665 883 509 PTY LTD	7ECC26674
ACN:	665 883 509	
ABN:	16665883509	
Registered in:	Western Australia	
Registration date:	20/02/2023	
Next review date:	20/02/2025	
Name start date:	22/03/2023	
Status:	Registered	
Company type:	Australian Proprietary Company	
Class:	Limited By Shares	
Subclass:	Proprietary Company	

Address Details		Document Number
Current		
Registered address:	20 Walters Drive, OSBORNE PARK WA 6017	3EUV17922
Start date:	20/02/2023	
Principal Place Of Business address:	20 Walters Drive, OSBORNE PARK WA 6017	3EUV17922
Start date:	20/02/2023	

Share Information

Share Structure

Class	Description	Number issued	Total amount paid	Total amount unpaid	Document number
ORD	ORDINARY	100	100.00	0.00	3EUV17922

Members

Note: For each class of shares issued by a proprietary company, ASIC records the details of the top twenty members of the class (based on shareholdings). The details of any other members holding the same number of shares as the twentieth ranked member will also be recorded by ASIC on the database. Where available, historical records show that a member has ceased to be ranked amongst the top twenty members. This may, but does not necessarily mean, that they have ceased to be a member of the company.

Name: LITHIUM RESOURCES PTY LTD
ACN: 654 457 299
Address: 20 Walters Drive, OSBORNE PARK WA 6017

Class	Number held	Beneficially held	Paid	Document number
ORD	100	yes	FULLY	7ECN46976

Documents

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Date received	Form type	Date processed	Number of pages	Effective date	Document number
20/02/2023	201C Application For Registration As A Proprietary Company	20/02/2023	3	20/02/2023	3EUV17922
22/03/2023	205Y Notification Of Resolution Changing Company Name To Acn	22/03/2023	2	22/03/2023	7ECC26674
03/07/2023	351 Deed Relating To Class Order	18/07/2023	40	03/07/2023	031768185
16/01/2024	484N Change To Company Details Changes To (Members) Share Holdings	16/01/2024	2	16/01/2024	7ECN46976
22/02/2024	484E Change To Company Details Appointment Or Cessation Of A Company Officeholder	22/02/2024	2	22/02/2024	7ECO94822

17/04/2024	484E Change To Company Details Appointment Or Cessation Of A Company Officeholder	17/04/2024	2	17/04/2024	7ECR24714

*****End of Extract of 3 Pages*****

MINERAL RESOURCES

APPENDIX B
STAKEHOLDER ENGAGEMENT REGISTER

Date	Stakeholder	Description of Engagement	Stakeholder comments/Issues	Proponent Response and/or Resolution	Stakeholder Response
November 2017	Shire of Coolgardie	Preliminary scoping meeting	No issues raised.	N/A	N/A
December 2018	DEMIRS and Shire of Coolgardie	Preliminary scoping meeting	No issues raised.	N/A	N/A
April 2019	DEMIRS	Phone and email correspondence regarding approach to Mining Proposal and Mine Closure Plan.	No issues raised.	N/A	N/A
May 2019	Shire of Coolgardie	Meeting to discuss Development Application.	No issues raised.	N/A	N/A
June 2019	Shire of Coolgardie	Council briefing for upcoming Development Application.	No issues raised.	N/A	N/A
17 March 2021	Shire of Coolgardie	Introduction and general update meeting.	Introduced Dan Barker and discussed more regular, ongoing communication between both parties.	MinRes to prepare a project overview/map of projects for their information.	Shire remains highly supportive of our operations and is keen to stay better informed.
22 March 2021	Shire of Coolgardie (SoC)	General Update on MinRes projects and opportunity to raise any issues.	James (SoC) flagged a keen desire to support our projects but to be transparent and keep them informed.	No actions required.	No issues, positive meeting.
14 June 2021	Marlinyu Ghoorlie	Discuss native title agreement and heritage.	No issues raised.	No actions required.	N/A
15 June 2021	Marlinyu Ghoorlie	Business development opportunities.	No issues raised.	No actions required.	N/A
23 June 2021	Goldfields-Esperance Development Commission	Update on projects and planned support of Goldfields Aboriginal Business Chamber.	No issues raised.	No actions required.	N/A
23 June 2021	Wheatbelt Development	Update on operations.	A possible 'native seed harvesting'	WDC main focus is on agriculture.	N/A

Date	Stakeholder	Description of Engagement	Stakeholder comments/Issues	Proponent Response and/or Resolution	Stakeholder Response
	Commission (WDC)		program to help bolster the availability of seedlings to meet the future needs of mining rehabilitation.		
29 June 2021	Marlinyu Ghoorlie	Business development opportunities.	No issues raised.	Understanding business capabilities of the MG.	N/A
10 August 2021	Marlinyu Ghoorlie	Rehabilitation and seed collection business discussions with Olive Branch (MG business) and Red Dirt Seeds and West Coast Civil.	No issues raised.	Arranging JV set up and requirements to capture business critical rehab work through Indigenous business.	N/A
02 September 2021	Shire of Coolgardie	Discussed community partnership framework.	No issues raised.	N/A	N/A
25 October 2021	Marilinyu Ghoorlie	Negotiations toward a comprehensive native title and heritage agreement (claim wide).	Issues surrounding legacy agreements were raised.	No actions required.	N/A
4 November 2021	DEMIRS	To provide an update to DEMIRS of Mt Marion operations and inform DEMIRS of the upcoming Mine Proposal and Mine Closure Plan submissions to align the site with new (2020) regulatory guidelines.	No issues raised.	Mine Proposal and Mine Closure Plan submission scheduled for the 30th of November 2021.	N/A
24 November 2021	DWER – Industry Regulation	Email to Kerri Wilkes, highlighted suggested changes to Part V Licence L9037/2017/1, and if a meeting is required or to	None raised as at 25/11/21.	Stakeholder sufficiently updated.	N/A

Date	Stakeholder	Description of Engagement	Stakeholder comments/Issues	Proponent Response and/or Resolution	Stakeholder Response
		just submit licence amendment application.			
25 November 2021	St Ives	Mt Marion Lithium Project Update. MinRes provided a letter to St Ives providing an update in regard to the submission of a new MP and MCP for Mt Marion.	None raised as at 25/11/21.	Stakeholder sufficiently updated.	N/A
25 November 2021	[redacted]		None raised as at 25/11/21.	Stakeholder sufficiently updated.	N/A
26 November 2021	Shire of Coolgardie	Presented proposal of MP and MCP. Shire appreciated the consultation and said any permits or approvals required by the Shire would be given priority.	No issues raised.	Stakeholder sufficiently updated.	Shire appreciated the consultation and said any permits or approvals required by the Shire would be given priority.
08 December 2021	Community Members DBCA Yilgarn Shire WA Salt Toodyay Naturalists Club	Brief update on Mt Marion mentioned during the Yilgarn Community Consultation Group meeting.	No issues raised.	Stakeholder sufficiently updated.	N/A
25 February 2022	Marilinyu Ghoorlie	Negotiation meeting with MG in Kalgoorlie.	No issues raised.	Positive meeting with a few small items to follow up on.	N/A
02 March 2022	Shire of Coolgardie	Meeting at Kambalda Minerals Forum.	No issues raised.	Positive meeting	N/A

Date	Stakeholder	Description of Engagement	Stakeholder comments/Issues	Proponent Response and/or Resolution	Stakeholder Response
		Updated on all projects and timelines.			
08 March 2022	Goldfields Aboriginal Business Chamber	Mentor session run with new Executive Manager of GABC.	No issues raised.	Stakeholder sufficiently updated.	N/A
17 March 2022	Marlinyu Ghoorlie – Olive Branch Enterprises	Discussion to progress cultural awareness training and labour hire opportunities.	No issues raised.	Stakeholder sufficiently updated.	N/A
April 2022	DWER – Industry Regulation	Clarify future approvals required for upgrades to operations	No issues raised.	MinRes to provide information for DWER to review and decide on approval process – Complete Apr 22	N/A
April 2022	DEMIRS	Mining Proposal – Discuss information requests in RFI received from DEMIRS in April 2022	No issues raised.	Meeting held RFI supporting. Information sent to DEMIRS via EARS on 9 May 2022	N/A
May 2022	DWER – Industry Regulation	Discussed future changes and final designs to determine if this information can be incorporated into the current DWER licence amendment or require a separate Works Approval	No issues raised.	MinRes to provide information to add to licence amendment – Complete June 22 DWER will commence LAA review once additional info are received – Complete July 2022	N/A
May 2022	DEMIRS	Mining Proposal – Discuss information requests in second RFI received from DEMIRS in May 2022	No issues raised.	Meeting held RFI supporting. Information sent to DEMIRS via EARS July 2022	N/A
June 2022	DWER – Industry Regulation	MinRes provided DWER information for changes for increased throughput in Wastewater Treatment Plant	No issues raised.	MinRes to provide information to add to licence amendment – Complete July 22	N/A

Date	Stakeholder	Description of Engagement	Stakeholder comments/Issues	Proponent Response and/or Resolution	Stakeholder Response
		to be included in licence amendment			
June 2022	DWER – Industry Regulation	DWER issued draft licence for feedback	N/A	MinRes to provide feedback on draft licence conditions – Complete 1 July 22	N/A
July 2022	DWER – Industry Regulation	DWER issued licence to MinRes	N/A	MinRes to implement licence after public appeal period – Complete 26 July 22	N/A
August 2022	DWER – Industry Regulation	[redacted]	N/A	DWER assessment in progress, anticipated approval July 2023	N/A
August 2022	DEMIRS	Mining Proposal approved 2 Aug 22	N/A	MinRes to implement MP	N/A
19 October 2022	DPLH	Request for information related to historic s 18s lodged over the mine	No issues raised.	N/A	N/A
October 2022	DWER – Industry Regulation	MinRes submitted works approval for Wastewater Treatment Plant increase throughput and change of Prescribed category	No issues raised.	DWER commenced review of application Oct 22	N/A
November 2022	DWER – Industry Regulation	DWER sent MinRes an RFI for Wastewater Treatment Plant works approval application. DWER approved clearing permit CPS 9518 15 Nov 22 MinRes submitted a	No issues raised.	MinRes to submit information requested – Completed Dec 22 DWER advised of recommencement of review 1 Dec 22 MinRes to comply with permit conditions	N/A

Date	Stakeholder	Description of Engagement	Stakeholder comments/Issues	Proponent Response and/or Resolution	Stakeholder Response
		clearing permit for road widening of the main entrance. MinRes submitted Clearing permit amendment for road widening of main entrance – CPS 8632.			
November 2022	DEMIRS	Engage and provide an update for relevant approvals.	No issues raised.	MP amendment to be submitted 2023	N/A
November 2022	DEMIRS	Mining Proposal – Submission – Increased Footprints of Waste Rock Landforms, Pit Expansions	N/A	MP amendment to be submitted 2023	N/A
22 November 2022	City of Kalgoorlie Boulder	Provided an update on MinRes operations in the Goldfields area, noting there are no current operations withing the City's local government boundary. Discussed social challenges across housing and skills shortages in Kalgoorlie-Boulder and outlined MinRes commitment to supporting social investment through our investments in the Goldfields Women's Refuge, Goldfields Aboriginal Business Chamber, and our community grants program.	No issues raised. No actions to follow up.	Agreed to meet annually to provide high level updates unless otherwise required. Next meeting scheduled in August 2023.	Update was well received and appreciated.

Date	Stakeholder	Description of Engagement	Stakeholder comments/Issues	Proponent Response and/or Resolution	Stakeholder Response
December 2022	DWER – Industry Regulation	Licence Amendment – Submission – Increase Production Capacity to 4Mtpa.	N/A	Licence amendment submitted June 2023, expected approval July 2023.	N/A
1 December 2022	DWER – Industry Regulation	Groundwater Licence Application Section 26D submitted to authorise taking of groundwater for hydro investigation and sampling purposes	N/A	Ongoing – expected submission 2023	N/A
January 2023	DWER – Industry Regulation	Expected Works – Road entrance to Mt Marion – Held up by an amendment to a clearing permit CPS 8632. Ongoing consultation with DWER. Amendment to CPS 8632/2017, resubmitted to DWER 13/12/2022.	N/A	Ongoing – expected approval Aug 23	N/A
01-February-2023	Marilinyu Ghoorlie	Discuss upcoming Heritage surveys	MinRes to send Heritage survey trips to Terra Rosa Consulting	James was appreciative of the update, and remains highly supportive of our operations, and use of Shire infrastructure including his camp accommodation and airstrip.	N/A
27-February-2023	Shire of Coolgardie	MinRes provided a high-level update on our ongoing expansion of the Mt Marion mining operation, as well as possible areas of further development in the region.	No issues raised	MinRes acknowledged for their contribution to the project and support of the team.	N/A

Date	Stakeholder	Description of Engagement	Stakeholder comments/Issues	Proponent Response and/or Resolution	Stakeholder Response
30-March-2023	Coolgardie Junior Volunteer Fire Brigade	Engagement visits with previous Community Grant recipients	Applications opening for the April round. Encouraged to apply for April round for enable MinRes logo inclusion in annual Comp shirts	Follow-up email with revised application form	
02-June-2023	Marlinyu Ghoorlie	Engagement providing a summary of all MinRes operations in the Goldfields and Yilgarn region, including the scope of the DWER Licence amendment and MP submission in 2023.	Positive	Provide copy of applications prior to submission of applications.	N/A
06-June-2023	DWER – Industry Regulation	Engage and provide an update on scope of Licence Amendment.	Officer provided general advice on upcoming approval.	Submission of approval in June 2023.	Received approval and approval in progress.
28-June-2023	DEMIRS	Engage and provide an update on scope of MP.	Officer provided general advice on upcoming approval and future underground approvals	Submission of approval in July 2023.	N/A
12-July-2023	DWER – Native Clearing branch	[redacted]	DWER provided general advice on upcoming approval	Submission of approval in August – Dec 2023.	N/A
14-July-2023	DEMIRS – Native Clearing branch	Engage, request general advice, and provide an update on scope of future clearing permits for both Mt Marion and Wodgina sites	DWER provided general advice on upcoming approvals	Submission of approval in August – Dec 2023.	N/A

Date	Stakeholder	Description of Engagement	Stakeholder comments/Issues	Proponent Response and/or Resolution	Stakeholder Response
02-November 2023	DEMIRS	Update on activities at Mt Marion, including proposed underground mining	DEMIRS discussed preferred approvals approach, including key factors to address	MinRes submitted Mining Proposal with required information requested by DEMIRS	Mining Proposal submitted and approved (Reg ID 121578)
21-November-2023	DEMIRS	Meeting to discuss RFI on Mining Proposal Reg ID 120019	Discussed aligning Mining Proposal with L9037	Ongoing licence applications will align with Mining Proposal, and vice versa	N/A
12-December 2023	Shire of Coolgardie	Hosted an industry workshop on behalf of the Shire to explore opportunities for investing in Coolgardie and Kambalda	The Shire was highly appreciative of MinRes support in helping drive further investment in their communities	MinRes reiterated our commitment to reinvesting in the Coolgardie community with direction from the Shire	N/A
20-December-2023	DWER – Indistry Regulation	Approval of L9037/2017/1	DWER provided revised licence	N/A	N/A
06-February 2023	Shire of Coolgardie	Updated Mine Plan Presentation	No issued raised	N/A	N/A
21-February 2024	Woolibar Pastoral Station	Update on water investigation and Heritage Surveys at Mt Marion	Requested details on proposed disturbance and timing of surveys.	MinRes provided dimensions and amount of hydro drill pads and dates/ area of heritage surveys.	N/A
27- March 2024	Marilinyu Ghoorlie	Update on current and proposed activities at Mt Marion	No concerns raised	N/A	N/A
19- April 2024	Marilinyu Ghoorlie	Agreement negotiation meeting	N/A	Negotiations ongoing.	N/A
16- May 2024	Marlinyu Ghoorlie	Cultural Mapping Workshop	N/A	Heritage focus	N/A
6-September-2024	DWER – Industry Regulation	Scoping DWER requirements for TSF increase, Paste and Float Plants	DWER advised a LAA required for TSF increase and WAA required for Paste and Float plants.	N/A	N/A

Date	Stakeholder	Description of Engagement	Stakeholder comments/Issues	Proponent Response and/or Resolution	Stakeholder Response
24-September-2024	Marilinyu Ghoorlie	Meeting to provide update on the status of MinRes projects and engage in relation to activities proposed	Positive. No issues raised	N/A	N/A
3 December 2024	Woolibar Pastoral Station	Updated Access Agreement	Agreement ongoing	N/A	N/A
30/01/2025	DMPE	Variation to tenement conditions	No issues	N/A	N/A
01/05/2025	Shire of Coolgardie	Change to differential rates	No issues	N/A	N/A
06/06/2025	DWER	Clarification of permit amendment request.	Clarification received.	N/A	N/A
19-September 2025	Marilinyu Ghoorlie	Agreement negotiation meeting	N/A	Negotiations ongoing	N/A
20-February 2026	Marilinyu Ghoorlie	Agreement negotiation meeting	N/A	Negotiations ongoing	N/A

APPENDIX C
ENVIRONMENTAL COMMISSIONING PLAN

MINERAL RESOURCES

ENVIRONMENTAL COMMISSIONING PLAN

FLOTATION PLANT AND PASTE PLANT

MT MARION LITHIUM PROJECT

27/02/2026 VERSION 00

DOCUMENT INFORMATION

[redacted]

Revision History

[redacted]

Document Purpose
Submitted with Works Approval Application Form IR-F09 v16.0

Acknowledgement of Country

MinRes is committed to reconciliation and recognises and respects the significance of Aboriginal and Torres Strait Islander peoples' communities, cultures, and histories. MinRes acknowledges and respects Aboriginal and Torres Strait Islander peoples as the traditional custodians of the land.

TABLE OF CONTENTS

Tables

1. INTRODUCTION

This Commissioning Plan supports a Works Approval Amendment application to be submitted to the Department of Water and Environmental Regulation (DWER) for the Mt Marion Lithium Project (the "Project"). The Project is operated by Mt Marion Lithium Management, a 100% owned subsidiary of Mineral Resources Limited ("MinRes").

The Project is currently licenced under L9037/2017/1 for Prescribed Premises Categories 5, 6, 12, 54, 57, 64, 73 and 85B.

This Commissioning Plan has been prepared to ensure construction and commissioning is undertaken in accordance with the Works Approval application which requests approval to construct and operate a Flotation Plant and a Paste Plant at the Project.

Commissioning of both the Flotation Plant and the Paste Plant shall be carried out by MinRes in accordance with this Commissioning Plan.

2. COMMISSIONING STAGES AND TIMESCALE

The commissioning stages and indicative timing are provided in **Table 1** and **Table 2** for the Flotation Plant and the Paste Plant, respectively.

Table 1: Indicative Flotation Plant Commissioning Schedule

Task	Indicative Start Date	Indicative End Date
Construction Earthworks	July-26	Oct-26
Construction Steelworks	Sept-26	June-27
Commissioning and Ramp up	Oct-27	June-28
Production at Design Capacity	June-28	Ongoing

Table 2: Indicative paste plant commissioning schedule

Task	Indicative Start Date	Indicative End Date
Construction Earthworks	Oct-26	Dec-26
Construction Steelworks	Jan-26	Oct-27
Commissioning	Oct-27	Dec-27
Ongoing Operations	Jan-28	Ongoing

3. IMPACTS, MANAGEMENT AND MONITORING

Potential impacts and management associated with the Prescribed Premises commissioning activities are summarised below. Further information is available in the Works Approval Application Supporting Document.

3.1 DUST EMISSIONS

In addition to already established dust emission controls to minimise adverse impacts, the following management measures will be implemented during the commissioning phase of the Project:

- Water carts will be used on a continuous basis to reduce dust produced through vehicle movements.
- Water sprays will be fitted to stockpile areas and processing circuits to ensure ore remains moist during material handling activities.
- A Mt Marion Dust Monitoring Plan has been implemented as conditioned under Part V Licence L9037/2017/1.

3.2 NOISE EMISSIONS

In addition to already established noise emission controls currently in place to minimise adverse impacts, the following management measures will be implemented during the commissioning phases of the Project:

- All plant equipment will be regularly maintained to ensure they are operating efficiently and are not unduly noisy.

3.3 DISCHARGE TO LAND AND SURFACE WATER

3.3.1 Flotation Plant

Sump pumps will be positioned within the concrete bunded areas of the Flotation Plant, with all flows within the bunds contained and directed back into the processing plant.

All surface water runoff is diverted away from the Flotation Plant and to be contained in the catchment pond or the Ghost Crab In-Pit TSF.

3.3.2 Paste Plant

The Paste plant area is predominantly affected by the local rainfall; any minor surface water runoff is to be managed into a sump pond or the existing drainage.

3.4 MONITORING

A monitoring plan for the commissioning phase is provided in **Table 3**. Monitoring data will be reviewed by a competent person as soon as it is available to identify any trends of concern or exceedances of provisional trigger values.

Table 3: Commissioning Monitoring Plan

Aspect	Monitoring Type	Frequency
Dust from construction activities	Inspection photos.	During construction as required.
	Hazard Identifications, Investigation and controls.	

Aspect	Monitoring Type	Frequency
Air/greenhouse gas emissions	National Greenhouse and Energy (NGER) reporting.	Annual
	National Pollutant Inventory (NPI) reporting.	Annual
Hydrocarbon leaks from surface mobile, equipment, light and heavy vehicles and diesel tanks	Logbooks. Inspections and maintenance records. Incident report form.	Daily

4. MANAGEMENT OF ACCIDENTS AND MALFUNCTIONS

Contingencies for the commissioning phase are summarised in Table 3. A register of hazards, incidents and corrective actions will be maintained during commissioning.

Table 4: Contingency Plan

Contingency	Action
Spill or leak of plant lubricants	• Isolate appropriate equipment or section, recover spill, identify fault and repair. • Dispose of contaminated absorbents. • Remove any contaminated soil to bioremediation area or stored and removed by waste carrier.
Spill or leak of reagents, mine water, process solutions, product or tailings	• Isolate appropriate equipment or section, identify fault and repair. • Recover spill and return to plant or tailings thickener as appropriate. • Recover reagent spills according to Safety Data Sheet (SDS). • Recover any contaminated soil to tailings thickener.
Dust suppression or collection systems not working properly	Identify fault and repair.
Excessive ore dust from stockpiling or crushing	Increase rate of water application from sprinklers or water carts.

5. REPORTING

A Commissioning Report will be submitted to DWER within 30 calendar days of the completion of commissioning for each item of infrastructure. This report will include the following:

- A summary of the environmental performance of the infrastructure as installed, against the design specification set out in the Works Approval application.
- A review of performance against any specific Works Approval conditions.
- Where Works Approval conditions have not been met, measures proposed to meet the design specification and/or Licence conditions, together with timescales for implementing the proposed measures.

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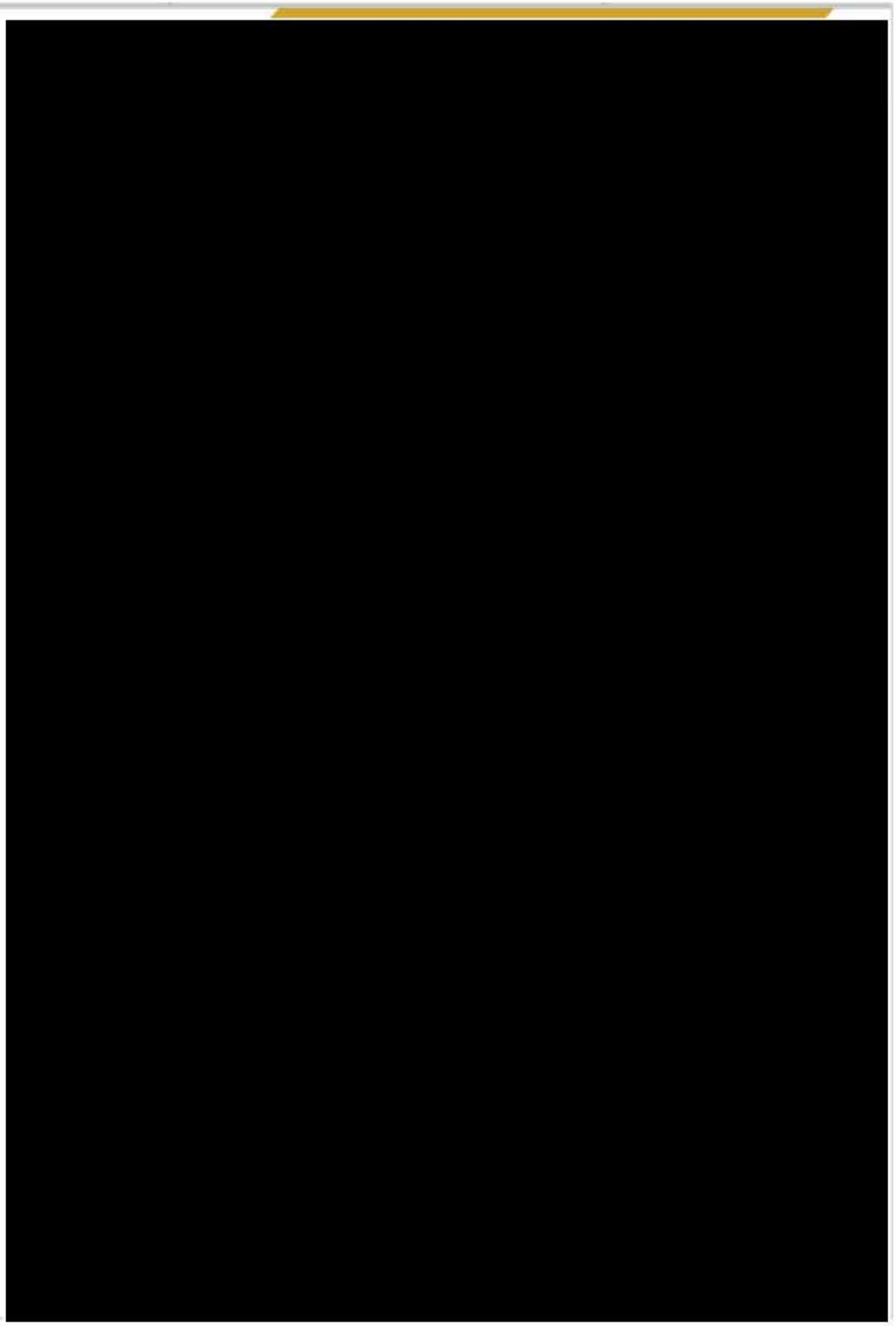
MINERAL RESOURCES

APPENDIX D



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