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## QUARTERLY ACTIVITIES REPORT

### 30 September 2024

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#### Highlights:

- Latrobe Magnesium's Demonstration Plant Project achieved 1-year Lost Time Injury free with over 90,000 construction workhours worked, an excellent achievement.
- Completed all construction and commissioning of the Magnesium Oxide section of the Demonstration Plant.
- Demonstration Plant final commissioning and limited operation is anticipated to commence by February 2025. The purpose of this is to reach a steady state production level, obtain the necessary data for Stage 2 approval and produce Magnesium Oxide and secondary products in sustainable quantities. LMG will provide a project update in January on this phase.
- Following production of saleable magnesium oxide, the construction and subsequent commissioning of the magnesium metal section of the Demonstration Plant will commence in the 2nd Quarter of 2025.
- LMG is waiting on the allocation of Sarawak Energy's hydropower required for its Stage 3, 100,000 tpa plant. LMG understands that a recommendation is being made for allocation to LMG at the next Power Planning and Coordination Committee meeting in Sarawak, the body responsible for approving the allocation.

#### 1. Stage 1 Demonstration Plant

##### 1.1 Engineering & Procurement, Construction, & Commissioning

##### **Stage 1A – Magnesium Oxide (MgO) Production**

Engineering and construction work in the September quarter concentrated on minor upgrades to improve plant operability and efficiency, which were observed during the commissioning trial.

Key tasks included, but were not limited to, the following:

- Insulation upgrades for the Spray Roaster.
- Final epoxy painting and coating of the Spray Roaster for environmental protection.
- Replacement and optimisation of agitators, which was the primary cause of the restart delay.
- Installation of new recycle and bypass piping to improve process efficiency.
- Piping reconfiguration to mitigate the risk of blockages in slurry lines.
- Additional lighting for the Spray Roaster to enable safe 24-hour operation.
- Installation of surplus capacity hydromet tanks to better manage process upsets.
- Comprehensive labelling of valves, instrumentation, and piping.
- Installation of additional instrumentation including flowmeters, vibrators, CCTV, and control valves to enhance operational control.
- Process Control Software (PCS) updates to accommodate system modifications and upgrades.
- Additional concrete works to prevent contamination of fly ash feedstock during operations.



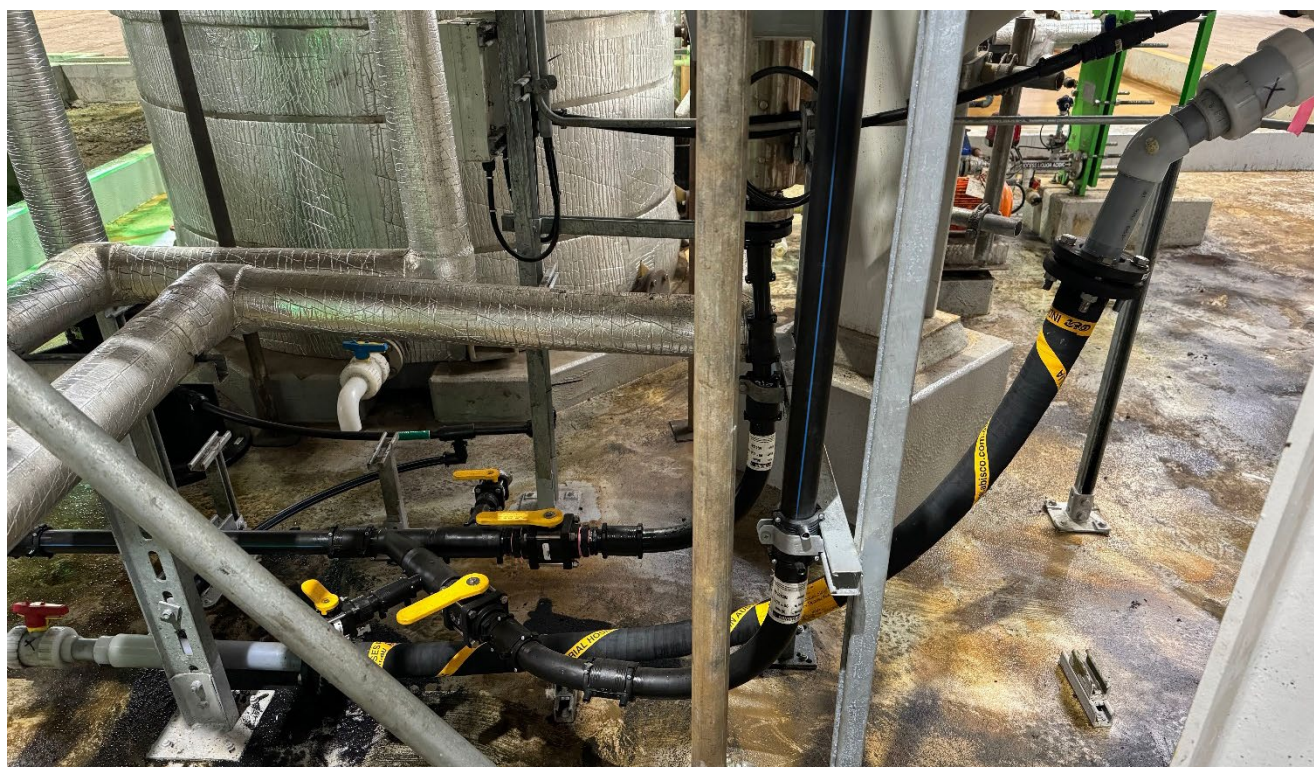
***Figure: Spray Roaster reactor vessel insulation works completed***





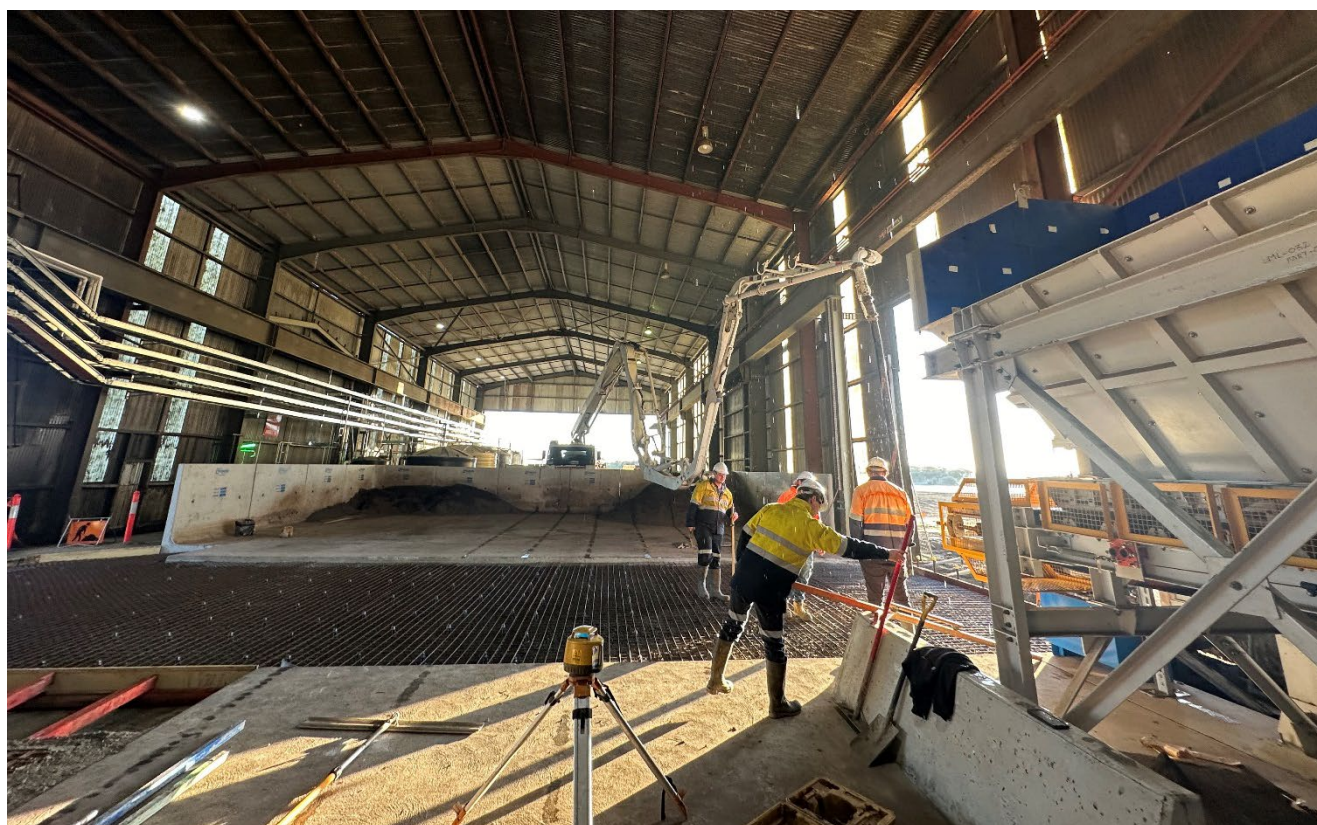
**Figure:** Hydromet upgrades completed with installation of new instrumentation





**Figure:** Hydromet piping modifications and installation new surplus capacity tanks completed





**Figure:** Additional concrete works for Fly Ash area



## Stage 1B – Magnesium Metal Production

As well as focusing on Stage 1A plant modifications, limited construction for Stage 1B was continued during the quarter to maintain continuity and experience in the site team.

Civil works have continued in the briquetting area to ensure, Structural, Mechanical and Piping (SMP) activities can continue to progress. The foundations will house critical equipment for briquette production, which will be used in the downstream thermal reduction process.

Key equipment, including the briquette machine, ball mill, conveyors and dust collectors, have been positioned on-site, with additional equipment in transit and expected to arrive by the end of October. Pipe installation for quicklime delivery is underway.



**Figure:** Briquette civil work excavation and rebar works in progress





**Figure:** Briquette civil formwork in progress (top) Briquetting machine, conveyor placed on completed concrete foundations (bottom)





**Figure:** Quicklime piping installation in progress

## **1.2 Operations**

LMG's operations readiness plan has been put in place at the same time as rectification works for Stage 1A.

Due to the revised strategy of developing the Demonstration Plant in stages to manage cashflow, it was decided to recommission the plant to produce MgO whilst the construction of Stage 1B was ongoing. However, the Demonstration Plant was never designed to be break even until producing commercial quantities of magnesium metal.

Therefore, to avoid a substantial cash loss, the plant will only be operated for two to three months to achieve the following goals:

- Demonstrate the previous success of the commissioning trial over a longer timeframe.
- Improve the specification of the MgO product even further.
- Demonstrate sustainable operation and apply this learning to the overall plant when metal is commissioned and for inclusion in the Stage 2 planning.
- Produce quantities of secondary products for customer verification and future testwork for Stage 2 flowsheet development.
- Generate sufficient emissions data to demonstrate actual emissions performance against modelled emissions to enable permitting of Stage 2 to commence.

Due to the shortened timeframe of 2 to 3 months to produce MgO, it was not possible to directly employ the operations team as originally planned and instead an operations and maintenance contract approach will be utilised.



LMG's existing site contractors O&M Pty Ltd (O&M) and Mechanical Maintenance Solutions Pty Ltd (MMS) were engaged to provide operating and maintenance labour for the limited MgO production phase. Given the short duration and time required to get a site agreement in place, O&M's existing Enterprise Agreement, relating to service and maintenance, will be utilised for the MgO production phase.

Additional operational activities have been undertaken during the quarter to prepare the site for longer term running:

- Planning for additional safety signs/barricading.
- Development of operational procedures and training materials.
- Implementing a Permit to Work system for all maintenance activities during the production phase.
- Development of safety procedures.
- Implementing cyber security protection for the plant process control system, allowing remote access from LMG's automation partner Rockwell to help diagnose and repair control system faults remotely.
- Implementation of an operational HSE management system.
- Planning for all operations personnel PPE and tooling procurement.
- Development of the site emergency response plan including all communication protocols.
- Establishment of the operational document library.
- Development of the site Environmental Management Plan.
- Procurement of first fill reagents.
- Completion of the control room fit out.
- Finalisation of the fire protection plan.

Additionally, progress was made on the ash supply contract with RTL Mining & Earthworks Pty Ltd (RTL), with the ash deliveries being planned in time for site deliveries to commence ahead of the production phase.

The next major step of the MgO final commissioning and limited operation phase is mobilisation of personnel and commencement of personnel training. This will include the attendance of Tenova personnel to assist with Spray Roaster training and recommissioning.

## **2. Stage 2, 10,000tpa Commercial Plant**

### **2.1 Feasibility Study**

LMG has been working closely with Bechtel Australia Pty Ltd (Bechtel) over the past quarter to finalise the cost and scope proposal for the Feasibility Study (FS) of the Stage 2, 10,000tpa Commercial Plant in Victoria's Latrobe Valley.

The proposal, developed in collaboration with Bechtel and building on the insights from the Demonstration Plant project, strikes a balance between front-end loading and study costs. This approach is designed to position the project for a smooth transition to the Final Investment Decision.

Additionally, Bechtel commenced the development of a preliminary layout for Stage 2 as part of the early works of the FS.

### **2.2 Funding**

LMG is still looking into a sale and leaseback of its Tramway Road site or some other financing proposal. The funds obtained will be used to finance the GHD mine planning work, the Bechtel feasibility study and any additional test work required for the Stage 2 Commercial Plant.



LMG has submitted a \$10M application to the Federal Government for its International Partnership Critical Minerals program.

LMG is also looking to make an application to the United States Department of Defence's (DoD) Critical Minerals Program. LMG has been advised that we qualify for the DoD program because:

- Since December 2023, Australian suppliers are considered a domestic supplier in the US.
- LMG is using Bechtel for development of the Commercial Plant, who are a company headquartered in Reston, Virginia, in the US.
- LMG's offtake agreement is with Metal Exchange Corporation, from St Louis, Missouri, for 100% of the magnesium produced.
- LMG's low CO2 emissions profile, sustainability and circular economy approach.

Owing to the increase in expected cost of the Demonstration Plant, LMG's research and development (R&D) rebate has increased considerably. LMG has just recently submitted its rebate application to AusIndustry, which was subsequently registered and with LMG's lodging of its tax return, is now looking towards the Australian Tax Office (ATO) for payment. The 2024 rebate is estimated to be \$13.2M net. Given LMG's current related R&D debt facilities as of 30 September 2024, are some \$18M, the facility post receipt of this rebate should be in the order of \$5M.

RnD Funding Pty Ltd (RnD) recently provided LMG with an additional \$3M facility. RnD has advised LMG that they cannot draw on the last \$1M of their \$3M September draw until the ATO has paid the 2024 R&D tax rebate to LMG. Given the ATO's full investigation into LMG's 2023 tax rebate, this year's rebate is expected to be paid in December 2024. Until this amount has been paid by the ATO, LMG will not have the available funds to start up and operate the MgO part of the demonstration plant.

With the pending holidays and this funding restriction, it has been decided to delay the start of the Demonstration plant until January/February 2025.

LMG commissioned its R&D advisors to provide an estimate of their 2025 rebate based upon LMG's projected cash flows. Its advisors estimated a figure of up to \$13M was achievable for 2025 depending upon which activities are carried out.

### **3. Stage 3, 100,000tpa International Plant**

LMG continues to make progress on its proposed Stage 3, 100,000 tpa plant in Sarawak, Malaysia. LMG's Malaysian subsidiary, Latrobe Magnesium Sarawak Sdn. Bhd. (LMS) will be the corporate vehicle for the project.

LMS Chair and LMG Director, Peter Church OAM, and LMG CEO, David Paterson, travelled to Malaysia in September to progress discussions with local stakeholders including:

- The Sarawak Ministry of International Trade, Industry and Investment (MINTRED).
- Sarawak Energy Berhad, the State-owned electricity provider.
- Invest Sarawak, the Sarawak Government's entity responsible for coordinating and facilitating foreign investment proposals.

As the company has previously advised to the market, the allocation of electrical power by the Sarawak Power Planning and Coordination Committee is key to this project. Certainty for the project with respect to the key terms of a Power Purchase Agreement is also necessary before the next phase of work can be undertaken.

During August, LMS filed a submission to the Department of Environment, via its environmental consultant Chemsain Konsultan Sdn Bhd (Chemsain), seeking approval for the importation of ferronickel slag, the primary feed material to be used in the proposed LMS project. We look forward to a positive outcome on this matter in due course.



LMS has also retained Chemsain to prepare an Environmental Management Plan (EMP) for the process of Site Clearing at the project site LMS has secured in Samalaju Industrial Park. This work is likely to be completed during Q1 of 2025.

As noted in the previous quarterly report, LMG continues to engage with potential third-party equity partners regarding a stake in LMS, plus arms' length offtake agreements for magnesium of 50,000 tonnes per annum. These offtake agreements will allow LMG to secure debt funding from commercial and/or government backed institutions on more secure terms.

#### **4. Listing Rule 5.3.5**

ASX Listing Rule 5.3.5 requires quarterly activity reports to describe any payments made to related parties or their associates as disclosed in Appendix 5B for the same quarter. LMG advises that payments were made to Directors or companies associated with Directors for their services as Directors' fees.

Should you have any queries in relation to this announcement please do not hesitate to contact David Paterson on his mobile +61 421 234 688.

**David Paterson**

**Chief Executive Officer**

25 October 2024

#### **About Latrobe Magnesium**

Latrobe Magnesium (**LMG**) is developing a magnesium metal Demonstration Plant in Victoria's Latrobe Valley using its world first patented extraction process. LMG intends to extract and sell magnesium metal and cementitious material from industrial fly ash, which is currently a waste resource from brown coal power generation.

LMG has completed a feasibility study validating its combined hydrometallurgical / thermal reduction process that extracts the metal. The Demonstration Plant has now produced magnesium oxide with the full plant being commissioned in the second half of calendar year 2024.

A Commercial Plant will also be developed by LMG, with a capacity of 10,000 tonne per annum of magnesium metal, with completion targeted for the second half of calendar year 2026. The plant will be in the heart of Victoria's coal power generation precinct, providing access to feedstock, infrastructure, and labour.

LMG will sell the 10,000 tonne per annum of refined magnesium metal under long-term contracts to LMG's US-based distributors.

Magnesium has the best strength-to-weight ratio of all common structural metals and is increasingly used in the manufacture of car parts, laptop computers, mobile phones, and power tools.

LMG's projects are at the forefront of ESG best-practice by recycling power plant waste, avoiding landfill, encouraging a circular economy, and by being a low CO<sub>2</sub> emitter.



## Appendix 5B

### Mining exploration entity or oil and gas exploration entity quarterly cash flow report

Name of entity

Latrobe Magnesium Limited

ABN

55 009 173 611

Quarter ended ("current quarter")

30 Sep 2024

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (12 months) \$A'000
<b>1.</b>	<b>Cash flows from operating activities</b>		
1.1	Receipts from customers		
1.2	Payments for		
	(a) exploration & evaluation	(5)	(5)
	(b) development		
	(c) production		
	(d) staff costs	(860)	(860)
	(e) administration and corporate costs	(1,360)	(1,360)
1.3	Dividends received (see note 3)		
1.4	Interest received	3	3
1.5	Interest and other costs of finance paid	0	0
1.6	Income taxes paid	0	0
1.7	Government grants and tax incentives	0	0
1.8	Other (provide details if material)	0	0
<b>1.9</b>	<b>Net cash from / (used in) operating activities</b>	<b>(2,222)</b>	<b>(2,222)</b>

<b>2.</b>	<b>Cash flows from investing activities</b>		
2.1	Payments to acquire or for:		
	(a) entities	0	0
	(b) tenements	0	0
	(c) property, plant and equipment	(4,409)	(4,409)
	(d) exploration & evaluation	0	0
	(e) Investment	-3	-3
	(f) other non-current assets (patents)	17	17



Consolidated statement of cash flows		Current quarter \$A'000	Year to date (12 months) \$A'000
2.2	Proceeds from the disposal of:		
	(a) entities	0	0
	(b) tenements	0	0
	(c) property, plant and equipment	0	0
	(d) investments	0	0
	(e) other non-current assets	0	0
2.3	Cash flows from loans to other entities	0	0
2.4	Dividends received (see note 3)	0	0
2.5	Other	0	0
<b>2.6</b>	<b>Net cash from / (used in) investing activities</b>	<b>(4,429)</b>	<b>(4,429)</b>

<b>3.</b>	<b>Cash flows from financing activities</b>		
3.1	Proceeds from issues of equity securities (excluding convertible debt securities)	5,197	5,197
3.2	Proceeds from issue of convertible debt securities	0	0
3.3	Proceeds from exercise of options	0	0
3.4	Transaction costs related to issues of equity securities or convertible debt securities	(147)	(147)
3.5	Proceeds from borrowings	3,000	3,000
3.6	Repayment of borrowings	0	0
3.7	Transaction costs related to loans and borrowings		
3.8	Dividends paid		
3.9	Other (payment of lease liabilities)	(12)	(12)
<b>3.10</b>	<b>Net cash from / (used in) financing activities</b>	<b>8,038</b>	<b>8,038</b>

<b>4.</b>	<b>Net increase / (decrease) in cash and cash equivalents for the period</b>		
4.1	Cash and cash equivalents at beginning of period	565	565
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(2,222)	(2,222)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(4,429)	(4,429)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	8,038	8,038



Consolidated statement of cash flows		Current quarter \$A'000	Year to date (12 months) \$A'000
4.5	Effect of movement in exchange rates on cash held	-	-
4.6	<b>Cash and cash equivalents at end of period</b>	<b>1,953</b>	<b>1,953</b>

5.	Reconciliation of cash and cash equivalents at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts	Current quarter \$A'000	Previous quarter \$A'000
5.1	Bank balances	116	31
5.2	Call deposits	1,837	1
5.3	Bank overdrafts	-	-
5.4	Other (provide details)	-	-
5.5	<b>Cash and cash equivalents at end of quarter (should equal item 4.6 above)</b>	<b>1,953</b>	<b>32</b>

6.	Payments to related parties of the entity and their associates	Current quarter \$A'000
6.1	Aggregate amount of payments to related parties and their associates included in item 1 Payments for directors' services	41
6.2	Aggregate amount of payments to related parties and their associates included in item 2	-

*Note: if any amounts are shown in items 6.1 or 6.2, your quarterly activity report must include a description of, and an explanation for, such payments.*

7.	Financing facilities <i>Note: the term "facility" includes all forms of financing arrangements available to the entity. Add notes as necessary for an understanding of the sources of finance available to the entity.</i>	Total facility amount at quarter end \$A'000	Amount drawn at quarter end \$A'000
7.1	Loan facilities	28,000	25,000
7.2	Credit standby arrangements	-	-
7.3	Other	-	-
7.4	<b>Total financing facilities</b>	<b>28,000</b>	<b>25,000</b>
7.5	<b>Unused financing facilities available at quarter end</b>		<b>3,000</b>



## Mining exploration entity or oil and gas exploration entity quarterly cash flow report

7.6	Include in the box below a description of each facility above, including the lender, interest rate, maturity date and whether it is secured or unsecured. If any additional financing facilities have been entered into or are proposed to be entered into after quarter end, include a note providing details of those facilities as well.	
	Facility	\$28,000,000 – Secured
	Lender	RnD Funding Pty Ltd
	Interest Rate	12% pa. to 31 October 2023, and 18% pa. from 1 November 2023 to 31 December 2024 and 24% pa. thereafter to maturity date
	Maturity Date	31 December 2027
<b>8.</b>	<b>Estimated cash available for future operating activities</b>	<b>\$A'000</b>
8.1	Net cash from / (used in) operating activities (Item 1.9)	(2,222)
8.2	Capitalised exploration & evaluation (Item 2.1(d))	0
8.3	Total relevant outgoings (Item 8.1 + Item 8.2)	(2,222)
8.4	Cash and cash equivalents at quarter end (Item 4.6)	1,953
8.5	Unused finance facilities available at quarter end (Item 7.5)	3,000
8.6	Total available funding (Item 8.4 + Item 8.5)	4,953
8.7	<b>Estimated quarters of funding available (Item 8.6 divided by Item 8.3)</b>	2.22

8.8 If Item 8.7 is less than 2 quarters, please provide answers to the following questions:

8.8.1 Does the entity expect that it will continue to have the current level of net operating cash flows for the time being and, if not, why not?

8.8.2 Has the entity taken any steps, or does it propose to take any steps, to raise further cash to fund its operations and, if so, what are those steps and how likely does it believe that they will be successful?

8.8.3 Does the entity expect to be able to continue its operations and to meet its business objectives and, if so, on what basis?

## Compliance statement

- 1 This statement has been prepared in accordance with accounting standards and policies which comply with Listing Rule 19.11A.
- 2 This statement gives a true and fair view of the matters disclosed.

30 Sep 2024

Date: .....

Audit and Risk Committee

Authorised by: .....  
(Name of body or officer authorising release – see note 4)



**Notes**

1. This quarterly cash flow report and the accompanying activity report provide a basis for informing the market about the entity's activities for the past quarter, how they have been financed and the effect this has had on its cash position. An entity that wishes to disclose additional information over and above the minimum required under the Listing Rules is encouraged to do so.
2. If this quarterly cash flow report has been prepared in accordance with Australian Accounting Standards, the definitions in, and provisions of, *AASB 6: Exploration for and Evaluation of Mineral Resources* and *AASB 107: Statement of Cash Flows* apply to this report. If this quarterly cash flow report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standards apply to this report.
3. Dividends received may be classified either as cash flows from operating activities or cash flows from investing activities, depending on the accounting policy of the entity.
4. If this report has been authorised for release to the market by your board of directors, you can insert here: "By the board". If it has been authorised for release to the market by a committee of your board of directors, you can insert here: "By the [name of board committee – eg Audit and Risk Committee]". If it has been authorised for release to the market by a disclosure committee, you can insert here: "By the Disclosure Committee".
5. If this report has been authorised for release to the market by your board of directors and you wish to hold yourself out as complying with recommendation 4.2 of the ASX Corporate Governance Council's *Corporate Governance Principles and Recommendations*, the board should have received a declaration from its CEO and CFO that, in their opinion, the financial records of the entity have been properly maintained, that this report complies with the appropriate accounting standards and gives a true and fair view of the cash flows of the entity, and that their opinion has been formed on the basis of a sound system of risk management and internal control which is operating effectively.