

25 October 2024

## **QUARTERLY ACTIVITIES REPORT Quarter Ended 30 September 2024**

Emerging mineral processing technology company, Zeotech Limited (ASX: ZEO, "Zeotech" or "the Company") is pleased to provide the following update and commentary on activities undertaken during the three-month period ended 30 September 2024 (the "quarter").

#### **HIGHLIGHTS**

- Executive management significantly strengthened following the appointment of experienced industrial minerals executive, Mr James Marsh as Chief Executive Officer
- Approximately 10-tonnes of Toondoon kaolin has been solar dried, crushed, milled and packaged.
- Calcination test batch runs using a pilot-scale kiln have produced AusPozz™ high reactivity metakaolin ("HRM").
- Work commenced in September on a Preliminary Feasibility Study ("PFS") and Front-End Engineering Design ("FEED") study associated with mine development at the Company's Toondoon kaolin project and commercial scale metakaolin production in Queensland.
- 500-kilogram bulk sample of the Company's manufactured zeolite product arrives at Protekta Incorporated's ("Protekta") warehouse in North America for testing and product trials.
- Improved bio-methane production from the Company's simulated configurations supports the strategic decision of extending infield trials to December 2024 to evaluate the effectiveness of Zeotech's technology across broader seasonal conditions.

Zeotech, Chief Executive Officer, James Marsh, said:

"I am very pleased to be delivering this first Quarterly having recently joined Zeotech and given the positioning of the Company today. For our shareholders, this quarterly summarises the solid work done over the past months, that enables us to press forward and deliver further value.

Zeotech is executing on its strategy that will put the Company at the forefront of solutions for industrial decarbonisation, an issue very often discussed but rarely acted upon. I thank the Zeotech team for its diligence and our shareholders for their confidence and look forward to delivering further milestones in the months ahead."



#### **OPERATIONAL UPDATE**

#### **Metakaolin for Low-Carbon Cement & Concrete**

Following the completion of the test pit in the previous quarter, activities have focussed on processing the high-purity Toondoon kaolin to produce the targeted HRM products.

Approximately 10-tonne of Toondoon kaolin has been solar dried, crushed, milled and packaged into ~20-kilogram bags.





(left) four pallets of milled Toondoon kaolin ready for calcination and production of HRM (right) HRM produced from one of the calcination test batches

Several calcination test batch runs using a pilot-scale kiln have been completed on the milled kaolin, alongside testing and analysis to evaluate the optimum conditions for producing the Company's  $AusPozz^{TM}$  HRM.

Once the ideal operating conditions are determined, production runs will produce sufficient AusPozz™ HRM product to allow potential customers to conduct evaluations and product approval testing in low-carbon concrete pilot trials.

#### Preliminary Feasibility Study (PFS)

Work commenced in September on a PFS and FEED study associated with mine development at the Company's Toondoon kaolin project and commercial scale metakaolin production in Queensland.

Early activities have involved recruiting an in-house principal process engineer and engaging external consultants and advisors to complete the comprehensive study.

The PFS will evaluate low-impact mining at Toondoon that optimises solar drying. The study will also consider different methods of calcining kaolin to produce HRM, such as flash and rotary calcination, alongside assessing different energy sources and alternate fuels.

Completion of the studies will provide clarity on the calcining technology pathway and logistics options, support further engagement with industry as well as providing a platform to target State and Federal Government commercialisation funding that advances low-emissions technology in Australia and export market opportunities.



#### **Griffith University**

#### Methane Emissions Control Program

Early in the quarter, Zeotech and Griffith announced that a strategic decision had been made to extend the infield validation stage by 6-months to accommodate additional data collection and analysis, across a range of seasonal conditions. This will extend the Program's expiry to December 2024.

Activities during the quarter were focussed on extending and optimising bio-methane production from the simulated configurations to account for the cooler climatic conditions. As the Program has entered spring and as a result of the optimisation work, bio-methane production has improved significantly.

Program activities have now shifted focus to enhanced data collection and evaluating the effectiveness of the Company's zeote $CH_4$ ® products at oxidising and eliminating methane emissions.

Combined with the Program extension, the long-term datasets will help to evaluate the full potential of the Company's methane control technology by considering seasonal factors and periods of higher methane emissions during spring and summer.

#### **Zeotech In-House Laboratory**

Activities in the in-house lab have continued to focus on producing manufactured zeolite products using the Company's trade-secret and patent-pending processes, to replenish inventories following the 500-kilogram bulk sample that was shipped to Protekta last quarter.

#### **Marketing & Development**

#### Manufactured Zeolite

The Company's 500-kilogram bulk sample of its manufactured zeolite product, which was shipped during the previous quarter, arrived at Protekta's warehouse in September.

Protekta is an innovative North American company with a portfolio of innovative and evidence-based products designed to prevent illness through optimal nutrition. The group's solutions include a leading product containing manufactured zeolite. The novel zeolite-based product prevents subclinical hypocalcemia, also known as milk fever, in cows.

The bulk sample will undergo testing before Protekta arranges extruder trials in Q4 2024. Once the product is successfully produced, Protekta will arrange potential animal trials in collaboration with a North American University.

The shipment follows the execution of a Memorandum of Understanding ("MOU") in March 2024<sup>1</sup> between the two parties, which established the framework to negotiate the terms of a potential offtake agreement for Zeotech's manufactured zeolite product in good faith.

<sup>&</sup>lt;sup>1</sup> ASX Announcement 06/03/2024 - Zeotech Executes Non-Binding MOU with Protekta North America



#### Toondoon Kaolin

#### Metakaolin for Low-Carbon Cement & Concrete

During the quarter, Zeotech was accepted as an industry partner of the <u>Materials and Embodied Carbon Leaders Alliance</u> ("MECLA"). MECLA brings together organisations to drive reductions in embodied carbon in the building and construction industry. It recognises the growing demand for lower and zero-carbon materials worldwide and explores how organisations can work together to move Australia towards a zero-carbon economy and position Australia as a top material supplier through systems innovation.

MECLA has created 10 working groups dedicated to driving decarbonisation in various parts of industry. Zeotech has joined working group WG5B - Concrete & Cement, which was responsible for producing the 'MECLA Guide to Low Carbon Concrete' earlier this year.

Early introductions with the working group have already yielded strong engagement and possible commercial opportunities, with an international engineering and construction company interested in running a live trial using AusPozz™ HRM.

Zeotech looks forward to extending its involvement in MELCA as the Company targets approvals and sales for its AusPozz™ HRM product in low-carbon cement and concrete.

#### Kaolin Direct Shipping Ore ("DSO")

Discussions are underway with several strategically targeted potential customers for the kaolin DSO business, aimed at securing off-take agreements. Kaolin DSO presents the Company's nearest-term cashflow opportunity while the metakaolin business is commercialised.

#### **MINING TENEMENTS**

#### **Toondoon Kaolin Project ("Toondoon Project")**

#### Planning & Approvals

Following the completion of the test pit in the previous quarter, activities were focussed on mine preparation and planning to support the PFS workstreams.

No groundwork was undertaken during the quarter.

#### **Abercorn Kaolin Project ("Abercorn Project")**

The Abercorn Project is a large-scale kaolin prospect, located in central Queensland, which contains a resource of significant scale and consistent grade of kaolinite mineralisation.

No groundwork was undertaken during the quarter.

#### **CORPORATE**

#### **Executive Leadership Changes**

In August, the Company announced that it had appointed experienced industrial minerals executive Mr James Marsh as Chief Executive Officer ('CEO').



Mr Marsh commenced in the role on 9 September, and his appointment considerably strengthens the Company's executive management team as it focuses on executing its strategy to become Australia's first large-scale producer of high reactivity metakaolin ('HRM') for the low-carbon concrete and cement markets. As part of the appointment, the current CEO, Mr Scott Burkhart, was appointed as Chief Operating Officer ('COO').

Mr Marsh is a high-performing business leader with extensive experience across a wide range of industrial minerals and the materials sector spanning a 30-year period. This includes senior technical, marketing, and executive management roles with ASX-listed companies, including a five-year tenure as Managing Director and CEO of Andromeda Metals Limited and two global market leaders, including 15 years with Imerys Minerals Limited, a French multinational specialising in the production and processing of industrial minerals.

At Imerys, Mr Marsh was the technical representative on a global kaolin calcination team, overseeing metakaolin production. During this period, the use of metakaolin in building product applications and global intellectual property was developed. Further, he was heavily involved in the technical development and marketing of metakaolin from operations in the UK, France, and the USA.

Chief Development Officer, Alister Morrison, will leave the Company in November to take up new challenges in 2025. Zeotech would like to thank Alister for his contribution to the Company during his time and wish him the best in the future.

#### **APPENDIX 5B - QUARTERLY CASH FLOW REPORT**

The cash position of the Company on 30 September 2024 was \$1.262m.

Subsequent to the quarter, the Company announced on 14 October 2024 that it had received \$1.820m through the issue of 60,683,333 new fully paid ordinary shares from a placement to sophisticated investors.

During the quarter, the Company obtained a \$0.566m secured research & development (R&D) finance facility from R&DIUM Capital Ltd ("R&DIUM") for its eligible R&D expenditures for the 2024 financial year. Part proceeds of the loan were applied to repay a separate R&D finance facility of \$0.501m from Santilario Pty Ltd.

Subsequent to the quarter, Zeotech received a cash refund of \$0.906m from its R&D tax incentive claim for the financial year ended 30 June 2024. Funds were applied to repay the secured R&D finance facility with R&DIUM (incl. principal, interest & fees), and net surplus funds of \$0.317m were retained by the Company.

The placement and surplus R&D proceeds ensure that Zeotech is well funded to execute its near-term strategic initiatives throughout 2024 and beyond.

Details of mining exploration activities

Details of exploration activities during the quarter are set out above.

Exploration and evaluation expenditures for the quarter comprised \$3,000 for Toondoon and Abercorn resource evaluation work and \$17,000 for rents, rates, tenement management, and miscellaneous expenses.



Details of mining production and development activities

No production and development activities were undertaken during the quarter.

Research and Development Costs

R&D project Costs were \$301,000.

Details of related party payments

The aggregate amount of payments to related parties and their associates included in the current quarter's Cash flows from operating activities was \$130,000, comprising director salaries (inclusive of superannuation), directors' fees, and consulting fees.

This Announcement has been approved by the Board.

- End -

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Neville Bassett - Company Secretary

#### **About Zeotech**

Zeotech Limited (ASX: ZEO) is a team of dedicated people working together to build a future-focused company, leveraging wholly-owned high-grade kaolin resources to produce advanced materials for greenhouse gas (GHG) mitigation, such as zeolites for fugitive methane control and high-reactivity metakaolin (HRM) for the low-carbon concrete market.

#### **Zeotech Limited - Social Media Policy**

Zeotech Limited is committed to communicating with the investment community through all available channels.

Whilst ASX remains the prime channel for market-sensitive news, investors and other interested parties are encouraged to follow Zeotech on Twitter (@zeotech10) and LinkedIn.

Subscribe to ZEOTECH NEWS ALERTS - visit <a href="https://zeotech.com.au/contact/">https://zeotech.com.au/contact/</a>

#### No New Information

Except where explicitly stated, this announcement contains references to prior exploration results and Mineral Resource estimates, all of which have been cross-referenced to previous market announcements made by the Company. The Company confirms that it is not aware



of any new information or data that materially affects the information included in the relevant market announcements and, in the case of estimates of Mineral Resources that all material assumptions and technical parameters underpinning the results and/or estimates in the relevant market announcement continue to apply and have not materially changed.

#### **Forward-looking Statements**

This announcement may contain certain "forward-looking statements" which may not have been based solely on historical facts but are based on the Company's current expectations about future events and results.

Where the Company expresses or implies an expectation or belief as to future events or results, such expectation or belief is expressed in good faith and believed to have a reasonable basis. However, forward-looking statements are subject to risks, uncertainties, assumptions, and other factors, which could cause actual results to differ materially to futures results expressed, projected, or implied by such forward looking statements.

The Company does not undertake any obligation to release publicly any revisions to any "forward-looking statements" to reflect events or circumstances after the date of this announcement, or to reflect the occurrence of unanticipated events, except as may be required under the applicable securities laws.

#### **Tenement Information as required by Listing Rule 5.3.3**

The following is a table setting out the information as required by ASX Listing Rule 5.3.3, namely:

- 1. Mining tenements held at the end of the Quarter and their location;
- 2. Mining tenements disposed during the Quarter and location;
- 3. Beneficial percentage interests held in farm-in or farm-out agreements at end of Quarter; and
- 4. Beneficial percentage interests held in farm-in, or farm-out agreements acquired or disposed of during the Quarter.

Location	Tenement	Interest at beginning of quarter (%)	Interests relinquished, reduced or lapsed (%)	Interests acquired or increased (%)	Interest at end of quarter (%)
Australia	EPM 19081	100%	Nil	Nil	100%
Australia	EPM 26837	100%	Nil	Nil	100%
Australia	EPM 26903	100%	Nil	Nil	100%
Australia	EPM 27427	100%	Nil	Nil	100%
Australia	ML 80126	100%	Nil	Nil	100%
Australia	EPM 27395	100%	Nil	Nil	100%
Australia	EPM 27866	100%	Nil	Nil	100%

### Appendix 5B

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

Name of entity

ZEOTECH LIMITED	
ABN	Quarter ended ("current quarter")
29 137 984 297	30 SEPTEMBER 2024

Con	solidated statement of cash flows	Current quarter \$A'000	Year to date (3 months) \$A'000
1.	Cash flows from operating activities		
1.1	Receipts from customers	-	-
1.2	Payments for		
	(a) exploration & evaluation	(20)	(20)
	(b) development	-	-
	(c) production	-	-
	(d) staff costs	(394)	(394)
	(e) administration and corporate costs	(303)	(303)
1.3	Dividends received (see note 3)	-	-
1.4	Interest received	14	14
1.5	Interest and other costs of finance paid	(6)	(6)
1.6	Income taxes paid	-	-
1.7	Government grants and tax incentives	-	-
1.8	Other (Technology expenses)	(301)	(301)
1.9	Net cash from / (used in) operating activities	(1,010)	(1,010)

2.	Ca	sh flows from investing activities	
2.1	Pay	ments to acquire or for:	
	(a)	entities	-
	(b)	tenements	-
	(c)	property, plant and equipment	(1)
	(d)	exploration & evaluation	-
	(e)	investments	-
	(f)	other non-current assets	(53)

ASX Listing Rules Appendix 5B (17/07/20)

Con	solidated statement of cash flows	Current quarter \$A'000	Year to date (3 months) \$A'000
2.2	Proceeds from the disposal of:		
	(a) entities	-	-
	(b) tenements	-	-
	(c) property, plant and equipment	-	-
	(d) investments	-	-
	(e) other non-current assets	-	-
2.3	Cash flows from loans to other entities	-	-
2.4	Dividends received (see note 3)	-	-
2.5	Other (provide details if material)	-	-
2.6	Net cash from / (used in) investing activities	(54)	(54)

3.	Cash flows from financing activities		
3.1	Proceeds from issues of equity securities (excluding convertible debt securities)	-	-
3.2	Proceeds from issue of convertible debt securities	-	-
3.3	Proceeds from exercise of options	-	-
3.4	Transaction costs related to issues of equity securities or convertible debt securities	(7)	(7)
3.5	Proceeds from borrowings	566	566
3.6	Repayment of borrowings	(500)	(500)
3.7	Transaction costs related to loans and borrowings	-	-
3.8	Dividends paid	-	-
3.9	Other (provide details if material)	-	-
3.10	Net cash from / (used in) financing activities	59	59

4.	Net increase / (decrease) in cash and cash equivalents for the period		
4.1	Cash and cash equivalents at beginning of period	2,267	2,267
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(1,010)	(1,010)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(54)	(54)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	59	59

Con	solidated statement of cash flows	Current quarter \$A'000	Year to date (3 months) \$A'000
4.5	Effect of movement in exchange rates on cash held	-	-
4.6	Cash and cash equivalents at end of period	1,262	1,262

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	1,183	2,188
5.2	Call deposits	79	79
5.3	Bank overdrafts	-	-
5.4	Other (provide details)	-	-
5.5	Cash and cash equivalents at end of quarter (should equal item 4.6 above)	1,262	2,267

Payments to related parties of the entity and their associates	Current quarter \$A'000
Aggregate amount of payments to related parties and their associates included in item 1	130
Aggregate amount of payments to related parties and their associates included in item 2	-
	Aggregate amount of payments to related parties and their associates included in item 1  Aggregate amount of payments to related parties and their

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  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.	Total facility amount at quarter end \$A'000	Amount drawn at quarter end \$A'000
7.1	Loan facilities	566	566
7.2	Credit standby arrangements	-	-
7.3	Other (please specify)	-	-
7.4	Total financing facilities	566	566
7.5	Unused financing facilities available at qu	uarter end	-

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.

\$566,270 Secured Research and Development (R&D) Loan

- Lender: R&DIUM Capital Ltd
- Interest Rate: 16% per annum
- Loan facility was fully paid out on 16 October 2024 upon receipt of the R&D Refund from the ATO

8.	Estimated cash available for future operating activities	\$A'000
8.1	Net cash from / (used in) operating activities (item 1.9)	(1,004)
8.2	(Payments for exploration & evaluation classified as investing activities) (item 2.1(d))	-
8.3	Total relevant outgoings (item 8.1 + item 8.2)	(1,004)
8.4	Cash and cash equivalents at quarter end (item 4.6)	1,262
8.5	Unused finance facilities available at quarter end (item 7.5)	-
8.6	Total available funding (item 8.4 + item 8.5)	1,262
8.7	Estimated quarters of funding available (item 8.6 divided by item 8.3)	1.26
	Note: if the entity has reported positive relevant outgoings (ie a net cash inflow) in item 8.3 Otherwise, a figure for the estimated quarters of funding available must be included in ite.	
8.8	If item 8.7 is less than 2 quarters, please provide answers to the following	ng questions:
	8.8.1 Does the entity expect that it will continue to have the current le cash flows for the time being and, if not, why not?	evel of net operating

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?

Yes, as announced 14 October 2024, the Company has received \$1,820,500 through the issue of 60,683,333 new fully paid ordinary shares from a Placement to Sophisticated Investors. Also, as announced on 21 October 2024, \$905,884.46 was received for the 2024 R&D refund from the ATO which has been applied to repaying the research & development loan with R&DIUM Capital Ltd of \$589,248.18 (incl. principal, interest & fees) and net surplus funds of \$316,636.28 have been retained by the Company.

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?

Yes, the \$1.82m Placement referenced in item 8.8.2 has been successfully completed.

Note: where item 8.7 is less than 2 quarters, all of questions 8.8.1, 8.8.2 and 8.8.3 above must be answered.

#### **Compliance statement**

- 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.

Date: 25 October 2024

Authorised by: By the Board

(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.
- 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.