



ALEX IUM










**QUARTERLY ACTIVITIES REPORT
FOR THE PERIOD ENDED
30 SEPTEMBER 2018**

HIGHLIGHTS FROM THE QUARTER

- Completion of scale up, production and quality control assessments with Alexicool® solutions customers who are launching new products in CY 2019
- Successful completion of Pyroman® flammability testing on Alexium-treated fabrics for application to military uniforms
- New branding and microsite designed for Alexicool® product portfolio
- Net cash used in operating activities reduced by 42% over the previous quarter
- Appointment of Mr Jason Lewis as Chief Financial Officer, bringing 22 years of industry expertise gained from a career in specialty chemicals
- Appointment of Mr Allen Reihman as Chief Commercial Officer to lead sales, marketing and technology commercialisation efforts, bringing 18 years of experience in commercialisation of innovative chemical products
- Appointment of Ms Rosheen Garnon as Non-Executive Director, bringing extensive international experience in accounting, tax and risk analysis to the Company
- Implementation of new systems for improved controls on revenue management, forecasting, risk management and operational expenses



QUARTERLY RESULTS OVERVIEW

USD (Thousands)	Q1 2019	Q4 2018	\$ Variance	% Variance
Receipts from Customers	802	1,925	(1,123)	 58%
A) Research and Development	(123)	(162)	39	 24%
B) Product Manufacturing and Operating Costs	(449)	(2,277)	1,828	 80%
C) Advertising and Marketing	(58)	(9)	(49)	544%
D) Leased Assets	(19)	-	(19)	 100%
E) Staff Costs	(660)	(851)	191	 22%
F) Administration and Corporate Costs	(705)	(615)	(90)	 15%
Net Cash From/(Used In) Operating Activities	(1,420)	(2,432)	1,012	 42%
Net Cash From/ (Used In) Investing Activities	(223)	(209)	(14)	 7%
Net Cash From/ (Used In) Financing Activities	(76)	161	(237)	 147%
Cash and Cash Equivalents	8,887	10,642	(1,755)	16%

USD Reporting

As previously announced by the Company, Alexium's reporting currency changed from Australian to US dollars. As the Group's sales and operating expenses are in US dollars, this change will reduce the effect of foreign exchange volatility on the results. As such, all figures provided in this report are presented in US dollars.

Cash Receipts

Cash receipts fell from \$1,925,000 the previous quarter to \$802,000 this quarter. This was due to the final elimination of sales which did not meet the Group's gross margin threshold. While this reduction in cash receipts is significant, net cash loss from operating activities had also reduced from \$2,432,000 to \$1,420,000. Operating expenses also included costs of the business reorientation which has taken place over the past six months. The business reorientation is expected to result in the following:

- New Alexicool® technology in bedding applications;
- An expansion into higher volume markets; and
- A broader, more stable and committed customer base.

Based on orders received to date and procurement discussions with customers, we are confident that there will be increased revenue growth from Alexicool® technology sales in CY 2019.

Administrative and Corporate Costs

Higher executive recruitment fee services and consulting fees relating to reorientation of the business pushed administration costs 15% over the prior quarter. Excluding recruitment fees, administration charges were 16% less than the prior quarter.

Interest Paid

Interest paid in connection with the Company's debt facility in the prior quarter was 48% higher than forecasted as a result of a timing issue on monthly payments. In the current quarter, there has been a corresponding decline as only two payments are anticipated.

Cash Used in Operating Activities

As noted above, net cash used in operating activities totaled \$1,420,000 for the quarter representing a 42% reduction over the previous quarter. With continuing cost controls, operating expenses are forecasted to further decline and normalise during the 4th quarter.



1. Expansion of Alexicool® Products in Phase Change Material (PCM) Markets

The Alexicool® technology business is the cornerstone initiative that is the main driver to near-term profitability. As mentioned in the Highlights section of this report, Alexium has experienced an immediate and positive response to its PCM analytical tool, transforming relationships with customers. Consequently, Alexium has now met key milestones ahead of plan, including the following:

- Alexicool® chemistry is being successfully integrated into additional bedding components; and
- Bedding manufacturers are expanding use of this technology from low to higher volume mattress applications.

Based on work with customers, Alexium expects its customers to release more than 15 new bedding products and accessories incorporating Alexicool® PCM technology from January 2019 with positive implications for the Group's revenue growth during CY2019.

Over the past six months, Alexium repositioned itself as a value-creating partner as opposed to simply a chemistry provider. Customer feedback on the analytical tool shows it is highly regarded and utilised by a number of bedding companies in product development, performance specifications and quality assurance. The enthusiastic customer response to this collaborative scientific approach has been a major contributing factor in Alexium achieving several milestones as well as repositioning and formalising key relationships.

There are many commercial synergies for Alexium and its bedding customers. Alexicool® solutions customers can offer a wider range of products with optimal cooling and performance claims supported by strong analytical data. By agreeing performance and pricing metrics with Alexium, customers ensure performance consistency via a single sourced PCM treatment to all of their component and textile finishing contractors. This simplifies the sales process for Alexium, encourages an ever-wider acceptance of Alexium amongst fabric finishers as the preferred PCM provider to the bedding industry, thereby expanding the Company's customer base and revenues.

To communicate this message to the bedding market, the Group has created a new microsite that is dedicated to its Alexicool® technology. The site (www.alexicool.com) guides the bedding market on how Alexicool® products can enable improved product design and product performance. Additionally, new branding for the Alexicool® technology was introduced. These changes represent improved commercial strategies for a key cornerstone and will drive further growth in this market.

CORNERSTONE INITIATIVES

2. Application of Flame Retardant Nylon Cotton Blends (FR NyCo) for Military Uniforms

During this quarter, Pyroman® testing of Alexium-treated fabrics successfully completed and achieved the flammability requirements specified for the Flame Retardant Active Combat Uniform (FRACU) program. This is one of the most significant FRACU milestones achieved to date by Alexium, given the critical importance of the data provided in selecting the most appropriate final fabric selection for the 90-day field trials. Data from the Pyroman® test along with other fabric specifications will now be shared with the appropriate military personnel for evaluation and agreement on next steps.

The second initiative to provide flame protection for a broader range of military uniforms is progressing well with critical performance specifications and third-party validation of Alexium-treated fabrics having already been achieved. The focus has now advanced to addressing any potential outstanding technical issues arising from moving from prototype to large scale manufacturing. As this work is being undertaken under a Memorandum of Understanding (MOU), commercial and confidentiality considerations preclude the Company from providing significant additional detail at this time.

3. Commercialisation of Alexiflam® NF

As communicated to investors, ecological/toxicological testing for Alexiflam® NF is due to be finished by the end of CY 2019. With this completed, Alexiflam® NF can then move forward with Toxic Substances Control Act (TSCA) registration. Collaboration with our existing customer base has identified several applications where the functionality of Alexiflam® NF meets a currently unmet need with a rapid route to market. To maximise efficiency, Alexium will utilise existing supply chain once the US Environmental Protection Agency (EPA) regulatory procedures have been completed. Each of these applications represent not only a significant revenue opportunity for the Group, but also the opportunity to create a platform for high volume sales globally. As part of this effort, the Company is evaluating key potential partners for these markets.

FURTHER GROWTH OF ALEXIUM'S TECHNOLOGY

Product Portfolio Update

Alexium now has a prioritised business plan in place built around the three cornerstone initiatives. The Group has implemented policy decisions and has put in place the resources, systems, expertise and strict expense control to ensure its delivery. As each milestone is reached, the visibility of future revenues for each of the cornerstones is developing, as is the near-term path to profitability and sustainable growth.

With most major Alexicool® technology milestones met and sales expected to grow during CY 2019, management believes that it is now timely to add an additional complementary cornerstone application. Identified in consultation with its customers over the past two quarters, the opportunity will address a significant and growing market opportunity, where Alexium is confident that it can clearly demonstrate a compelling value-added alternative to the current proposition, leverage existing customer relationships, and generate additional revenues in CY 2019. More detailed information on the application, milestones and timescale will be provided by Dr Robert Brookins at the Annual General Meeting on 14 November 2018.



Appendix 4C

Quarterly report for entities subject to Listing Rule 4.7B

Introduced 31/03/00 Amended 30/09/01, 24/10/05, 17/12/10, 01/09/16

Name of entity

ALEXIUM INTERNATIONAL GROUP LIMITED

ABN

91 064 820 408

Quarter ended ("current quarter")

30 Sept 2018

Consolidated statement of cash flows	Current quarter \$US'000	Year to date (3 months) \$US'000
1. Cash flows from operating activities		
1.1 Receipts from customers	802	802
1.2 Payments for		
(a) research and development	(123)	(123)
(b) product manufacturing and operating costs	(449)	(449)
(c) advertising and marketing	(58)	(58)
(d) leased assets	(19)	(19)
(e) staff costs	(660)	(660)
(f) administration and corporate costs	(707)	(707)
1.3 Dividends received (see note 3)	-	-
1.4 Interest received	10	10
1.5 Interest and other costs of finance paid	(235)	(235)
1.6 Income taxes paid	-	-
1.7 Government grants and tax incentives	-	-
1.8 Other (GST received)	19	19
1.8 Other (FX Effect on Intercompany Transfer)	-	-
1.9 Net cash from / (used in) operating activities	(1,420)	(1,420)

Consolidated statement of cash flows		Current quarter \$US'000	Year to date (3 months) \$US'000
2.	Cash flows from investing activities		
2.1	Payments to acquire:		
	(a) property, plant and equipment	(10)	(10)
	(b) businesses (see item 10)	-	-
	(c) investments	-	-
	(d) intellectual property	(213)	(213)
	(e) other non-current assets	-	-
2.2	Proceeds from disposal of:		
	(a) property, plant and equipment	-	-
	(b) businesses (see item 10)	-	-
	(c) investments	-	-
	(d) intellectual property	-	-
	(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	(223)	(223)

3.	Cash flows from financing activities		
3.1	Proceeds from issues of shares	-	-
3.2	Proceeds from issue of convertible notes	-	-
3.3	Proceeds from exercise of share options	-	-
3.4	Transaction costs related to issues of shares, convertible notes or options	-	-
3.5	Proceeds from borrowings	-	-
3.6	Repayment of borrowings	(76)	(76)
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	(76)	(76)

Consolidated statement of cash flows		Current quarter \$US'000	Year to date (3 months) \$US'000
4.	Net increase / (decrease) in cash and cash equivalents for the period		
4.1	Cash and cash equivalents at beginning of quarter/year to date	10,642	10,642
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(1,420)	(1,420)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(223)	(223)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	(76)	(76)
4.5	Effect of movement in exchange rates on cash held	(36)	(36)
4.6	Cash and cash equivalents at end of quarter	8,887	8,887

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 \$US'000	Previous quarter \$US'000
5.1	Bank balances	178	178
5.2	Call deposits	8,709	8,709
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)	8,887	8,887

6.	Payments to directors of the entity and their associates	Current quarter \$US'000
6.1	Aggregate amount of payments to these parties included in item 1.2	173
6.2	Aggregate amount of cash flow from loans to these parties included in item 2.3	-
6.3	Include below any explanation necessary to understand the transactions included in items 6.1 and 6.2	
N/A		

7. Payments to related entities of the entity and their associates	Current quarter \$US'000
7.1 Aggregate amount of payments to these parties included in item 1.2	114
7.2 Aggregate amount of cash flow from loans to these parties included in item 2.3	-
7.3 Include below any explanation necessary to understand the transactions included in items 7.1 and 7.2	
N/A	

8. Financing facilities available <i>Add notes as necessary for an understanding of the position</i>	Total facility amount at quarter end \$US'000	Amount drawn at quarter end \$US'000
8.1 Loan facilities	10,865,606	10,547,574
8.2 Credit standby arrangements	-	-
8.3 Other (please specify)	-	-
8.4 Include below a description of each facility above, including the lender, interest rate and whether it is secured or unsecured. If any additional facilities have been entered into or are proposed to be entered into after quarter end, include details of those facilities as well.		
N/A		

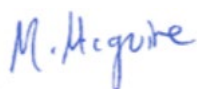
9. Estimated cash outflows for next quarter	\$US'000
9.1 Research and development	382
9.2 Product manufacturing and operating costs	1,515
9.3 Advertising and marketing	46
9.4 Leased assets	16
9.5 Staff costs	640
9.6 Administration and corporate costs	403
9.7 Other (provide details if material)	-
9.8 Total estimated cash outflows	3,002

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10.	Acquisitions and disposals of business entities (items 2.1(b) and 2.2(b) above)	Acquisitions	Disposals
10.1	Name of entity		
10.2	Place of incorporation or registration		
10.3	Consideration for acquisition or disposal		
10.4	Total net assets		
10.5	Nature of business		

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.



Sign here:
Company Secretary

Date: 31 October 2018

Print name: Maja McGuire

Notes

1. The quarterly report provides a basis for informing the market how the entity's activities have been financed for the past quarter and the effect on its cash position. An entity that wishes to disclose additional information is encouraged to do so, in a note or notes included in or attached to this report.
2. If this quarterly report has been prepared in accordance with Australian Accounting Standards, the definitions in, and provisions of, *AASB 107: Statement of Cash Flows* apply to this report. If this quarterly report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standard applies 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.