

QUARTERLY ACTIVITIES REPORT FOR THE PERIOD ENDED

30 JUNE 2016



ALEXIUM
SPECIALTY CHEMICALS AND SOLUTIONS



Architectural rendering of new Alexium Headquarters in Greenville, SC due to open 3rd Quarter 2016

Attached is the quarterly activities report for the period ended 30 June 2016 for Alexium (“Alexium,” “the Company”). The following information has been prepared to provide investors and other stakeholders with a better understanding of activities for the period ended June 30, 2016.

Target revenue for CY16 remains unchanged at \$18.5 million, and, as previously announced, ramp-up revenue is anticipated in the second half of the year. There is not a need to raise capital unless there is a large contract or a significant licensing agreement requiring significant working capital.

Business Overview

During the period, regulation continues to drive change in the flame retardant (FR) industry, and the legislative landscape remains favorable for Alexium. Momentum continues to build as outdated FRs are increasingly being phased out in the U.S. and other countries thus creating a demand for alternative technologies.

Due to an increased consumer focus on FR protection and growing industry concerns over liability for fire related incidents, the Company has identified an increased need for FR durability across all markets served. Alexium has quickly established itself as a singular technology in the durable, environmentally-friendly FR space. The Company’s position as a leader in innovation has resulted in significant growth in its sales pipeline.

The Company has observed two clear needs in the FR marketplace: the need to have a drop-in FR solution developed for the customer; and the desire to reduce complexity by having multiple chemistries supplied by the fewest possible suppliers. Alexium is successfully leveraging its strong capability to innovate and reliably develop complex chemical formulations to not only gain market share in the flame retardant industry but also capture significant business in several adjacent chemical markets. As evidence of that progress, in the last six months, the number of clients in the total sales pipeline increased by 129%, with a 95% increase in clients in the scale-up (or implementation) stage, where our customers become committed to using Alexium products. As further evidence of clients’ commitment in the implementation stage, of the clients in this stage at the beginning of calendar year 2016, 100% of those clients remain either in full production or in active implementation. See below for further details of Alexium progress.



MARKET OVERVIEW AND HIGHLIGHTS

Bedding and Decorative/Contract

In addition to Alexium's growing FR presence in the bedding market, the Company has experienced significant and increasing demand to include cooling properties in product lines. While this feature has historically only been available to high-end products, Alexium has leveraged this overall trend by successfully developing the Alexicool product which has enabled this desired feature for the much larger middle-end bedding segment. As a result, a wide range of global bedding manufacturers now have a cooling program being developed with Alexium in addition to our growing FR presence in the overall sector. Key achievements during the period:

- Alexium has expanded the product offering in this market from one chemical offering (FR), to four - adding phase change material (PCM), oil/water repellents, and crocking polymers.
- Alexium continues to quickly penetrate this market, with a 100% increase in sampled customers (those who are testing Alexium chemistry) since January 2016.
- By increasing product offerings for decorative fabrics, Alexium has expanded its U.S. and international market presence by 250% since July 2015.

Automotive / Transportation

In the automotive and transportation sectors, Alexium's chemistries are used on fabrics, upholstery and other components in automotive, aerospace and public transportation. Alexium has successfully produced and scaled-up chemical solutions for the transportation sector that meets new, strict environmental regulations including VOC and fogging requirements currently being implemented for model year 2018, making our chemistries superior to those now available. A selection of highlights:

- The Company's success in meeting these performance criteria has resulted in a 500% increase in client base over the last 6 months.
- Alexium has successfully met all performance criteria and has entered into the implementation stage with the automotive body cloth market leaders in the U.S. and Europe and are now engaged with their counterparts in South America and Asia.



Coatings and Polymers

Alexium's FR solutions have a wide range of applications in the coatings and polymers market including molded plastics, building construction and industrial fibers and cabling. The Company has developed and is manufacturing the first non-halogen reactive FR to the market in decades that is environmentally friendly and can replace current products. Some highlights include:

- The Company has achieved full technical approval from a major customer in the coatings and polymers market, and full scale run rates will commence upon third party certification.
- Alexium's products have successfully attracted the largest global suppliers in the FR market to engage in large scale, collaborative R&D efforts.
- The Company is actively targeting the market leaders in the composites and potting industry because current FR solutions are under intense regulatory scrutiny. Alexium's products address all concerns and are gaining approvals worldwide.

Outdoor

Alexium continues to have significant advantages in the outdoor fabrics market, which consists of awnings, tents, and furnishings. The Company has successfully developed and launched the newest and safest technology for the fast growing, worldwide camping market. Highlights include:

- Alexium is actively working with various brands to increase demand for the Company's technology in the outdoor market.
- Alexium has successfully produced the first durable, non-halogenated FR product which has been proven to pass the CPAI 84 soak test.
- Over the last six months, Alexium's FR product performance has generated heightened customer interest, resulting in an eight-fold increase in customer engagement.



Military

Alexium's FR chemical solutions are produced for use by the military for application to uniforms, gloves, backpacks, and tactical gear. The Company continues to make significant progress in executing its strategy to replace incumbents of several major government programs such as Flame Resistant Army Combat Uniform (FR ACU) by attacking the market from multiple angles including major prime suppliers and Tier 2 suppliers; the Company is also participating in all submissions with multiple vendors and working with government agencies to promote Alexium's new green technology. Key achievements:

- Alexium is finalizing a very successful trial effort with the U. S. Department of Defense to produce environmentally friendly FR NyCo for military uniforms.
- Due to the Company's success in this area, it is establishing partnerships throughout the supply chain, including fabric suppliers, commission finishers and garment makers, all of which would be needed in a military uniform procurement phase.
- Alexium has entered the prototype phase with militaries on four continents – North America, Europe, Australia and Asia.

Commercial Launch of Alexiflam NF

In this past quarter, Alexium launched a groundbreaking new chemistry for the \$100 million annual FR cotton chemistry market, which has seen little innovation in 40 years despite significant market needs not met by incumbent products. Alexium has successfully run full-scale, multi-ton production batches of Alexiflam NF and performed all necessary product registrations to offer this chemistry for sale in the European market. Alexiflam NF is expected to be released in the United States market in 2017.

Alexiflam NF fits in well with Alexium's existing eco-friendly products and formulations. Just as there is regulatory pressure to eliminate some toxic organohalogenes from the FR market, there is equal pressure to remove formaldehyde from FR chemistries as well. Existing products used to treat cotton products have significant levels of formaldehyde and must be labeled as hazardous whereas Alexiflam NF does not. The expectation is that this will prove to be an extremely



- Simplifies manufacturing process, requiring no specialized equipment and allowing it to be run in any standard textile facility.
- Produces effective FR finish, durable for over 50 laundering cycles.
- Priced competitively with established FR treatments.
- Can be applied to a wider range of fabric constructions and dyed fabrics due to mild processing conditions.

The Company's focus is in placing this innovative technology with global companies who are active in this market. Alexium is currently working to develop the right partnerships to realize the potential of the \$100 million annual FR cotton chemistry market.

Building a Global Business

Alexium's partnerships with distributors extend the Company's sales force from four to seventy through a global, commission-based sales network, resulting in ongoing customer growth in the U.S. and various regions of the world. The Company's global achievements to-date are summarized below:

United States	Europe	Asia-Pacific	South America
<ul style="list-style-type: none"> • Formalized distribution partnerships for Southeastern and Western States • Established 4 new toll manufacturing partners allowing for 15 million metric tons of production capacity per annum • Added personnel to internal sales team to continue to build pipeline 	<ul style="list-style-type: none"> • Formalized distribution partnerships for Southeastern and Western States • Established 2 new toll manufacturing partners allowing for 10 million metric tons of production capacity per annum 	<ul style="list-style-type: none"> • Formalized exclusive distribution partnerships for all of Australia, New Zealand, and 8 countries in Southeast Asia • Established a new toll manufacturing partners allowing for 10 million metric tons of production capacity per annum • Plant trials with new customers expected to begin as early as September 2016 	<ul style="list-style-type: none"> • Formalized exclusive distribution partnerships for Brazil and conducted formal product training • Completed formal sales training and are actively seeking opportunities • Currently engaged with over a dozen customers in the Brazilian market

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About Alexium

Alexium International Group Limited (ASX: AJX, AX:AJX OTC QX: AXXIY) holds proprietary patent applications for a process developed initially by the U.S. Department of Defense, which allows for the surface modification and attachment of nano-particles or multiple chemical functional groups to surfaces or substrates to provide functions such as fire retardancy, water proofing, oil proofing, and anti-microbial treatments. Applications under development include but are not limited to textiles, paints, and packaging, glass and building materials. Alexium's fire retardant chemical treatments are currently marketed for different fabric markets under the Alexiflam™, Ascalon™, Nycolon™, Nuvalon™, and Polytron™, Omnitron™ and Bactron™ trademarks. For additional information about Alexium, please visit www.alexiuminternational.com

Forward Looking Statement

This release contains forward-looking statements that are based on current expectations, estimates and projections about Alexium's business, management's beliefs and assumptions made by management. These statements are not guarantees of future performance and involve certain risks, uncertainties and assumptions which are difficult to predict. Therefore, actual outcomes and results may differ materially from what is expressed or forecasted in such forward-looking statements. Except where required by applicable law, the Company expressly disclaims a duty to provide updates to forward-looking statements after the date of this release to reflect subsequent events, changed circumstances, changes in expectations, or the estimates and assumptions associated with them.



Appendix 4C

Quarterly report for entities admitted on the basis of commitments

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

Name of entity

ALEXIUM INTERNATIONAL GROUP LIMITED

ABN

91 064 820 408

Quarter ended ("current quarter")

30 June 2016

Consolidated statement of cash flows

		Current quarter	Year to date (12 months)
		\$A'000	\$A'000
Cash flows related to operating activities			
1.1	Receipts from customers	866	2,860
	Other Income/Grants	-	459
1.2	Payments for (a) staff costs	(607)	(3,178)
	(b) advertising & marketing	(114)	(393)
	(c) research & development	(385)	(1,817)
	(d) leased assets	(17)	(71)
	(e) other working capital	(2,208)	(8,056)
1.3	Dividends received	-	-
1.4	Interest and other items of a similar nature received	10	44
1.5	Interest and other costs of finance paid	-	-
1.6	Income taxes paid	-	-
1.7	Other (GST)	26	76
	Net operating cash flows	(2,429)	(10,076)

+ See chapter 19 for defined terms.

Appendix 4C
Quarterly report for entities
admitted on the basis of commitments

		Current quarter	Year to date (12 months)
		\$A'000	\$A'000
1.8	Net operating cash flows (carried forward)	(2,429)	(10,076)
Cash flows related to investing activities			
1.9	Payment for acquisition of:		
	(a) businesses (item 5)	-	-
	(b) equity investments	-	-
	(c) intellectual property	-	(28)
	(d) physical non-current assets	(91)	(182)
	(e) other non-current assets	-	-
1.10	Proceeds from disposal of:		
	(a) businesses (item 5)	-	-
	(b) equity investments	-	-
	(c) intellectual property	-	-
	(d) physical non-current assets	-	-
	(e) other non-current assets	-	-
1.11	Loans to other entities	-	-
1.12	Loans repaid by other entities	-	-
1.13	Other (Loans from related entities)	-	-
	Net investing cash flows	(91)	(210)
1.14	Total operating and investing cash flows	(2,520)	(10,286)
Cash flows related to financing activities			
1.15	Proceeds from issues of shares, options, etc.	5,957	9,510
1.16	Proceeds from sale of forfeited shares	-	-
1.17	Proceeds from convertible notes	-	-
1.18	Repayment of borrowings	-	-
1.19	Dividends paid	-	-
1.20	Other (Share issue, Convertible Note Costs)	-	-
	Net financing cash flows	5,957	9,510
	Net increase (decrease) in cash held	3,437	(776)
1.21	Cash at beginning of quarter/year to date	7,577	11,621
1.22	Effects of exchange rate changes on cash	205	374
1.23	Cash at end of quarter	11,219	11,219

+ See chapter 19 for defined terms.

Payments to directors of the entity and associates of the directors

Payments to related entities of the entity and associates of the related entities

		Current quarter \$A'000
1.24	Aggregate amount of payments to the parties included in item 1.2	(183)
1.25	Aggregate amount of loans to the parties included in item 1.11	-

1.26 Explanation necessary for an understanding of the transactions

N/A

Non-cash financing and investing activities

2.1 Details of financing and investing transactions which have had a material effect on consolidated assets and liabilities but did not involve cash flows

N/A

2.2 Details of outlays made by other entities to establish or increase their share in businesses in which the reporting entity has an interest

N/A

Financing facilities available

Add notes as necessary for an understanding of the position.

		Amount available \$A'000	Amount used \$A'000
3.1	Loan facilities	-	-
3.2	Credit standby arrangements	-	-

+ See chapter 19 for defined terms.

Appendix 4C
Quarterly report for entities
admitted on the basis of commitments

Reconciliation of cash

Reconciliation of cash at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts is as follows.	Current quarter \$A'000	Previous quarter \$A'000
4.1 Cash on hand and at bank	1,126	1,026
4.2 Deposits at call	10,093	6,551
4.3 Bank overdraft	-	-
4.4 Other (provide details)	-	-
Total: cash at end of quarter (item 1.23)	11,219	7,577

Acquisitions and disposals of business entities

	Acquisitions (Item 1.9(a))	Disposals (Item 1.10(a))
5.1 Name of entity		
5.2 Place of incorporation or registration		
5.3 Consideration for acquisition or disposal		
5.4 Total net assets		
5.5 Nature of business		

Compliance statement

- 1 This statement has been prepared under accounting policies which comply with accounting standards as defined in the Corporations Act (except to the extent that information is not required because of note 2) or other standards acceptable to ASX.
- 2 This statement does ~~not~~* (delete one) give a true and fair view of the matters disclosed.

Nicholas Clark

29 July 2016

Sign here: Date:
 (Director/~~Company secretary~~)

Nicholas Clark

Print name:

+ See chapter 19 for defined terms.

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 wanting to disclose additional information is encouraged to do so, in a note or notes attached to this report.
2. The definitions in, and provisions of, *AASB 107: Statement of Cash Flows* apply to this report except for any additional disclosure requirements requested by AASB 107 that are not already itemised in this report.
3. **Accounting Standards.** ASX will accept, for example, the use of International Financial Reporting Standards for foreign entities. If the standards used do not address a topic, the Australian standard on that topic (if any) must be complied with.

+ See chapter 19 for defined terms.