

## QUARTERLY UPDATE & APPENDIX 4C

### Highlights;

- Second Pilot Production of Nullarbor™ Fibre Results in Improved Process
- Pilot Production of Nullarbor Fibre Specifically for Nonwoven Applications
- Global Research Collaboration to Explore New Applications of Microbial Cellulose

**Nanollose Limited (ASX:NC6)** (“Nanollose” or the “Company”) is pleased to provide its Appendix 4C cash flow statement for the quarter ending 31 March 2019, together with the following commentary.

### **Pilot Production of Nullarbor™ Fibre for Nonwoven Applications**

Nanollose successfully completed the second pilot scale production of its award-winning Tree-Free fibre, Nullarbor, and in doing so produced a fibre for use in nonwoven applications. The purpose of the production was to assess several alternative types of industrial equipment thought to be better suited to commercial scale production with microbial cellulose.

In addition, the test enabled Nanollose to produce a sample of Nullarbor fibre specifically engineered for the production of nonwoven textiles. This version of Nullarbor fibre incorporated a whitening agent, a crimped shape and an antistatic coating, all of which go to demonstrate the flexibility of Nanollose's technologies using existing industrial techniques and equipment.

The nonwoven textile market, which includes such diverse items as wipes, filters and single use surgical gowns, is estimated to be approximately US\$44 billion. Nonwovens differ from woven textiles in that they are made directly from the fibre without having to produce yarns, which are then made into textiles by knitting or weaving. A sample of the Company's new fibre for nonwoven applications has been provided to an industry leader in Europe who has expressed an interest in testing it in various applications and products.

### **Global Research Collaboration to Explore New Applications of Microbial Cellulose**

Nanollose entered into a collaborative research agreement to undertake a six-month project entitled “Bacterial nanocellulose, production and application testing” with RISE Processum ([www.processum.se](http://www.processum.se)), MoRe Research ([www.more.se](http://www.more.se)) and Umeå University ([www.umu.se](http://www.umu.se)).

The aims of the project are to i) further develop the production of microbial cellulose by up-scaling in stirred- tank reactors, ii) compare the properties of this type of microbial cellulose with other nanocellulose materials in various applications, such as paper manufacture and iii) produce and evaluate cellulose acetate from microbial cellulose.

This agreement allows Nanollose to access specialised expertise and equipment in the field of biorefining, cellulose acetate and paper production. Learnings from the project's biorefining methodologies also have the potential to be applied to other waste streams for increased production of microbial cellulose.

Cellulose acetate, often referred to simply as acetate, is a derivative made from cellulose which finds commercial applications as high-end and more eco-friendly plastics, films and fibres. The global market for cellulose acetate was estimated to be US\$3.8b in 2017 and is predicted to grow to about US\$7.9b in 2026.

## Outlook

The next 3-6 months will see Nanollose focus on the following objectives:

- Increase scale of microbial cellulose production.
- Partner with commercial fibre manufacturer for the production of Nullarbor.
- Convert our existing and future stockpile of microbial cellulose into Nullarbor fibre to be offered up to brands to create limited edition offerings.

## [ENDS]

For further information, please contact:

**Alfie Germano**  
CEO & Managing Director  
Email: [alfie.germano@nanollose.com](mailto:alfie.germano@nanollose.com)  
Phone: 0411 244 477

**Michael Wills**  
Media and Investor Relations  
Email: [michael.wills@nanollose.com](mailto:michael.wills@nanollose.com)  
Phone: 0468 385 208

## ABOUT NANOLLOSE

Nanollose Limited (ASX: NC6) is an innovative Australian company that uses a low cost and eco-friendly fermentation process to grow fibres that could become a sustainable alternative to conventional plant-derived cellulose fibres. The Company's process, which uses streams from various large-scale industries like sugar, wine and food, has the ability to produce 'Plant-Free' Cellulose. Cellulose is the hidden polymer most consumers know nothing about, but forms a huge part of items used in their everyday life such as clothing, paper and hygiene products.

## 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**

Nanollose Limited

**ABN**

13 601 676 377

**Quarter ended ("current quarter")**

31<sup>st</sup> March 2019

<b>Consolidated statement of cash flows</b>	<b>Current quarter \$A'000</b>	<b>Year to date (9 months) \$A'000</b>
<b>1. Cash flows from operating activities</b>		
1.1 Receipts from customers	0	0
1.2 Payments for		
(a) research and development	(302)	(668)
(b) product manufacturing and operating costs		
(c) advertising and marketing (including business development)	(82)	(255)
(d) leased assets		
(e) staff costs	(48)	(149)
(f) administration and corporate costs	(123)	(404)
1.3 Dividends received (see note 3)		
1.4 Interest received	13	47
1.5 Interest and other costs of finance paid		
1.6 Income taxes paid		
1.7 Government grants and tax incentives		
1.8 Other (provide details if material)		
<b>1.9 Net cash from / (used in) operating activities</b>	<b>(542)</b>	<b>(1,429)</b>
<b>2. Cash flows from investing activities</b>		
2.1 Payments to acquire:		
(a) property, plant and equipment	(11)	(77)
(b) businesses (see item 10)		
(c) investments		

Consolidated statement of cash flows	Current quarter \$A'000	Year to date (9 months) \$A'000
(d) intellectual property		
(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)		
<b>2.6 Net cash from / (used in) investing activities</b>	<b>(11)</b>	<b>(77)</b>

<b>3. Cash flows from financing activities</b>		
3.1 Proceeds from issues of shares	0	42
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	0	(17)
3.5 Proceeds from borrowings		
3.6 Repayment of borrowings		
3.7 Transaction costs related to loans and borrowings		
3.8 Dividends paid		
3.9 Other (provide details if material)		
<b>3.10 Net cash from / (used in) financing activities</b>	<b>0</b>	<b>25</b>

<b>4. Net increase / (decrease) in cash and cash equivalents for the period</b>		
4.1 Cash and cash equivalents at beginning of quarter/year to date	2,042	2,970
4.2 Net cash from / (used in) operating activities (item 1.9 above)	(542)	(1,429)
4.3 Net cash from / (used in) investing activities (item 2.6 above)	(11)	(77)
4.4 Net cash from / (used in) financing activities (item 3.10 above)	0	25

<b>Consolidated statement of cash flows</b>		<b>Current quarter \$A'000</b>	<b>Year to date (9 months) \$A'000</b>
4.5	Effect of movement in exchange rates on cash held		
<b>4.6</b>	<b>Cash and cash equivalents at end of quarter</b>	<b>1,489</b>	<b>1,489</b>

<b>5.</b>	<b>Reconciliation of cash and cash equivalents</b> at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts	<b>Current quarter \$A'000</b>	<b>Previous quarter \$A'000</b>
5.1	Bank balances	219	122
5.2	Call deposits	1,270	1,920
5.3	Bank overdrafts		
5.4	Other (provide details)		
<b>5.5</b>	<b>Cash and cash equivalents at end of quarter (should equal item 4.6 above)</b>	<b>1,489</b>	<b>2,042</b>

**6. Payments to directors of the entity and their associates**

- 6.1 Aggregate amount of payments to these parties included in item 1.2
- 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

**Current quarter  
\$A'000**

(268)

6.1 Payments to a director and their related entities for R&D consulting services, director's fees and accounting & company secretarial fees.

**7. Payments to related entities of the entity and their associates**

- 7.1 Aggregate amount of payments to these parties included in item 1.2
- 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

**Current quarter  
\$A'000**

Nil

Nil

N/A

8. <b>Financing facilities available</b> <i>Add notes as necessary for an understanding of the position</i>	Total facility amount at quarter end \$A'000	Amount drawn at quarter end \$A'000
8.1 Loan facilities	0	0
8.2 Credit standby arrangements	0	0
8.3 Other (please specify)	0	0
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. <b>Estimated cash outflows for next quarter</b>	\$A'000
9.1 Research and development	320
9.2 Product manufacturing and operating costs	
9.3 Advertising and marketing	70
9.4 Leased assets	
9.5 Staff costs	48
9.6 Administration and corporate costs	123
9.7 Other (provide details if material)	
<b>9.8 Total estimated cash outflows</b>	<b>561</b>

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

**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:  ..... Date: 29 April 2019  
Company Secretary

Print name: Erlyn Dale

**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.