

QUARTERLY ACTIVITIES REPORT FOR THE PERIOD ENDED 31 DECEMBER 2021

Operational Highlights

- Completion of the first pilot scale processing of microbial cellulose ('MC') – the penultimate step in the preparation of Nullarbor™ Tree-Free, high tenacity lyocell, and a significant milestone for the Company.
- Work with Birla Cellulose continued during the Quarter towards completion of the first pilot fibre spin.
- Completion of the first pilot fibre spin is anticipated to occur in February, which will mark the most important milestone yet in the commercialisation of the Company's Tree-Free Nullarbor™ lyocell fibre.
- Joint Patent Application with Grasim filed globally via PCT.

Key Objectives for 1H-CY2022

- Complete pilot fibre spin to produce the first amounts of Nanollose's revolutionary fibre, yarns and fabrics for supply to selected partners.
- Sign agreements with leading global brands in the fashion and apparel industry for the provision of samples and commencement of product trials.

Commenting on the Quarter, Nanollose Executive Chairman, Wayne Best, said: *"During the December 2021 Quarter, the Company continued to work with Birla Cellulose towards finalising the first pilot spin, which has been slightly delayed due to Covid-19 related disruptions, and which we are now expecting to be completed in February. During the Quarter, Nanollose achieved a key milestone, with the completion of the penultimate step in the manufacture of Nullarbor™ lyocell fibre, being the first pilot scale processing of MC. We look forward to updating shareholders regarding the pilot spin shortly."*

Nanollose Limited (ASX:NC6) ("**Nanollose**" or the "**Company**") a leading biomaterials company commercialising scalable technology to create fibres and fabrics with minimal environmental impact, is pleased to provide shareholders and investors with an overview of activities for the period ending 31 December 2021 ("**Quarter**", "**Reporting Period**").

Operational

Pilot Production of Nullarbor™ Fibres

During the Reporting Period, Nanollose continued to advance towards completion of the first pilot fibre spin. Due to Covid-19 related delays, the pilot fibre spin is now anticipated to complete in

February, which will mark the most important milestone yet towards the commercialisation of the Company's Tree-Free Nullarbor lyocell fibre.

The Reporting Period marked the successful completion of the penultimate step in the manufacturing of Nullarbor fibre, the processing of raw MC into material suitable for use in the lyocell process. This step is a key milestone for the Company with the specific technical goals of the pilot trial being achieved as planned. The Company noted during the Quarter that final preparatory testing of the resultant processed MC identified that a small quantity of fine metal particles was introduced during the drying process. Whilst the metal particles were not ultimately able to be removed from the specific batch of MC in an efficient manner, the source of the metal particles was identified as related to an isolated event from the drying equipment, which was subsequently resolved and will not affect future work. The achievement of this processing step significantly reduced a key risk of the pilot program, with the achievement of this result at pilot scale marking the passing of another important milestone.

The Company has since supplied Birla Cellulose with an additional batch of MC, and its processing in preparation for the pilot fibre spin is almost complete, and has proceeded without incident.

Work is also ongoing to incorporate the information gained from these initial pilot trials into improvements in MC production in order to streamline the overall waste to fibre process. During the Reporting Period the Company continued to refine product specifications and define and further refine quality control policies and procedures, utilising knowledge gained in the leadup to the pilot spin. Refinements and further definition will be ongoing through to commercial production.

Potential Offtake Partners

During the Reporting Period, the Company continued to advance discussions with leading fashion and textile brands that have expressed an interest in obtaining material from the Company. The Company continued to work closely with its fashion consultant, Carla Woidt, to shortlist the most suitable partners for the Company's strategy going forward.

The Company has focussed on shortlisting high quality partners that have a commitment to sustainable solutions for the fashion industry's environmental challenges, and that are seeking a long-term relationship with Nanollose.

The Company is looking forward to formalising these negotiations during the current quarter, following completion of the pilot spin, when it will be in a position to provide samples to selected partners for trials and testing.

Joint Patent Application Update - Grasim

The Company is pleased to announce that shortly following the end of the Quarter, the Company's joint patent application (entitled *High Tenacity Lyocell Fibres From Bacterial Cellulose and Method of Preparation Thereof*) with Grasim Industries Limited ("Grasim") was filed globally via the Patent Cooperation Treaty (PCT).

The Company is pleased with the progress being made towards finalising formal patent protection of its intellectual property, and is pleased with the continued commitment from Grasim to the success of the project.

Production of First 100% Nullarbor™ Lyocell Garment

During the Quarter, Nanollose and Birla Cellulose produced a small quantity of 100% Tree-Free Nullarbor lyocell fibre, which is in the process of being converted into yarn. Working closely with Carla Woidt, Nanollose engaged one of Australia's leading fashion designers, who has designed a garment to showcase this revolutionary fibre. Nanollose has also contracted an Australian based garment manufacturer, who will use this design to transform the yarn into the Company's first garment made from 100% Nullarbor lyocell.



The Company's 100% Tree-Free Nullarbor™ Lyocell fibre at various stages in the process from fibre to yarn, being from left to right: Raw Fibre; Carded Fibre (Beard), Sliver (6x Carded Beards); Roving (1x Sliver); Ring Spun Yarn.

The Company expects to be in a position to unveil the completed garment by the end of this quarter, and looks forward to having a tangible product available to showcase to the market the quality, feel, and appeal of its fibre.

Internal Research and Development Projects

During the Quarter, the Company continued to progress internal research and development initiatives, including improvements to the Company's Jelli Grow™ product, development of an MC-based alternative to leather, and the development of absorbency materials.

The Company looks forward to updating the market on these projects as significant milestones are determined and met.

Six Monthly Outlook

As Nanollose continues to progress towards the commercialisation of its next generation, Tree-Free fibres, there are several key milestones that the Company aims to achieve in the coming six months:

- Undertake the first pilot spin of Nanollose's Nullarbor™ lyocell fibre (anticipated to occur in February).
- Enter into a number of agreements to provide initial quantities of fibre from the first pilot spin to selected partners.
- Continue implementing refinements into MC production and procure material to support ongoing pilot production of fibre.
- Supply initial quantities of fibre, yarns, and textiles from the pilot spin to selected partners.
- Commence product trials with leading global brands in the fashion and apparel industry.
- Explore the use of high tenacity Tree-Free lyocell for use in the nonwoven sector as the Company seeks to commercialise Nufolium™ for nonwoven fibre applications, including personal wipes (which is a high growth market).
- Undertake second and subsequent pilot processing and spins at increased scale.
- Explore commercial opportunities for second and subsequent pilot spins.

Appendix 4C – Quarterly Cash Flow

The Company's Appendix 4C Quarterly Cash Flow Report for the quarter ended 31 December 2021 accompanies this announcement, and demonstrates a strong cash balance of \$2.15 million.

In accordance with Listing Rule 4.7C, as noted in its Appendix 4C, during the Quarter the Company continued to practise diligent cash management, expending a gross total of \$376,000 on the operations of the Company, and receiving a total of \$1,000. This was comprised of research and development (\$236,000), advertising and marketing (\$36,000), staff costs (\$26,000), administrative and corporate costs (\$77,000) and finance costs (\$1,000), and interest received (\$1,000).

The Company also made payments for property plant and equipment (\$3,000), and received proceeds from the exercise of options (\$20,000).

The payments included at section 6.1 of the attached Appendix 4C relate to Executive Directors' Salaries (\$62,000), Non-Executive Director Fees (\$28,000), and Company Secretary, Accounting and Office Fees (\$27,000).

[ENDS]

AUTHORITY AND CONTACT DETAILS

This announcement has been authorised for release by the Board of Nanollose Limited.

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ABOUT NANOLLOSE

Nanollose Limited (ASX: NC6) is a leading biotechnology Company commercialising scalable technology to create fibres with minimal environmental impact. Nanollose uses an 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, including food and agriculture, has the ability to produce 'Tree-Free' Cellulose. Cellulose is the hidden polymer building block most consumers know nothing about, but forms a huge part of items used in their everyday life such as clothing, paper and hygiene products.

In January 2021, Nanollose filed a joint patent application with Birla Cellulose, for a high tenacity, Tree-Free lyocell made from microbial cellulose (*High Tenacity Lyocell Fibres From Bacterial Cellulose and Method of Preparation Thereof*). Using the lyocell process, a team of fibre experts at Grasim's Pulp and Fibre Innovation Centre produced nullarbor fibre that is finer than silk and significantly stronger than conventional lyocell that is traditionally produced from wood pulp. Nanollose's primary focus is on commercialising this fibre technology.

ABOUT BIRLA CELLULOSE AND GRASIM INDUSTRIES LIMITED

Birla Cellulose, a business unit of Grasim Industries Limited, part of Aditya Birla Group (ABG), is a leading sustainability focused man made cellulosic fibre producer, with its nature based fibres being produced from renewable wood sourced from sustainably managed forests. Grasim Industries Limited, a flagship company of the ABG, ranks amongst the top publicly listed companies in India and operates pulp and fibre business in India.

Grasim Industries operates its pulp and fibre business, which applies closed loop processes and environmentally efficient technologies, that recycle raw materials and conserve natural resources. Grasim's five global advanced research centres are equipped with state of the art facilities and pilot plants, with new generation innovative products including Livaeco™, Liva Reviva, Birla Excel (lyocell), in addition to Liva Antimicrobial and Birla Spunshades, which are designed with superior sustainable credentials.

With an aim to create bigger and broader impact, Grasim collaborates actively with its value chain partners and works closely with organizations including, Canopy Planet, Sustainable Apparel Coalition (SAC), Zero Discharge of Hazardous Chemicals (ZDHC), Changing Markets Foundation, Textile Exchange, WBSCD, Fashion for Good amongst others to continually learn and apply the best practices within its global operations and across its value chain.

Appendix 4C

Quarterly cash flow report for entities subject to Listing Rule 4.7B

Name of entity

Nanollose Limited

ABN

13 601 676 377

Quarter ended ("current quarter")

31 December 2021

Consolidated statement of cash flows	Current quarter \$A'000	Year to date (6 months) \$A'000
1. Cash flows from operating activities		
1.1 Receipts from customers	0	0
1.2 Payments for		
(a) research and development	(236)	(526)
(b) product manufacturing and operating costs	0	0
(c) advertising and marketing	(36)	(77)
(d) leased assets	0	0
(e) staff costs	(26)	(49)
(f) administration and corporate costs	(77)	(211)
1.3 Dividends received (see note 3)	0	0
1.4 Interest received	1	1
1.5 Interest and other costs of finance paid	(1)	(2)
1.6 Income taxes paid	0	0
1.7 Government grants and tax incentives (R&D Rebate)	0	0
1.8 Other (Covid 19 Cash Flow Boost)	0	0
1.9 Net cash from / (used in) operating activities	(375)	(864)

2. Cash flows from investing activities		
2.1 Payments to acquire or for:		
(a) entities	0	0
(b) businesses	0	0
(c) property, plant and equipment	(3)	(5)
(d) investments	0	0
(e) intellectual property	0	0

Consolidated statement of cash flows	Current quarter \$A'000	Year to date (6 months) \$A'000
(f) other non-current assets	0	0
2.2 Proceeds from disposal of:		
(a) entities	0	0
(b) businesses	0	0
(c) property, plant and equipment	0	0
(d) investments	0	0
(e) intellectual property	0	0
(f) 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 (provide details if material)	0	0
2.6 Net cash from / (used in) investing activities	(3)	(5)

3. Cash flows from financing activities		
3.1 Proceeds from issues of equity securities (excluding convertible debt securities)	0	0
3.2 Proceeds from issue of convertible debt securities	0	0
3.3 Proceeds from exercise of options	20	20
3.4 Transaction costs related to issues of equity securities or convertible debt securities	0	0
3.5 Proceeds from borrowings	0	0
3.6 Repayment of borrowings	0	0
3.7 Transaction costs related to loans and borrowings	0	0
3.8 Dividends paid	0	0
3.9 Other (provide details if material)	0	0
3.10 Net cash from / (used in) financing activities	20	20

4. Net increase / (decrease) in cash and cash equivalents for the period		
4.1 Cash and cash equivalents at beginning of period	2,515	3,006
4.2 Net cash from / (used in) operating activities (item 1.9 above)	(375)	(864)
4.3 Net cash from / (used in) investing activities (item 2.6 above)	(3)	(5)

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (6 months) \$A'000
4.4	Net cash from / (used in) financing activities (item 3.10 above)	20	20
4.5	Effect of movement in exchange rates on cash held	0	0
4.6	Cash and cash equivalents at end of period	2,157	2,157

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	567	495
5.2	Call deposits	1,620	2,020
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)	2,157	2,515

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	117
6.2	Aggregate amount of payments to related parties and their associates included in item 2	
	Payments at section 6.1 relate to Executive Directors' Salaries (\$62,000), Non-Executive Director Fees (\$28,000), Company Secretary, Accounting and Office Fees (\$27,000)	

Quarterly cash flow report for entities subject to Listing Rule 4.7B

7. Financing facilities	Total facility amount at quarter end \$A'000	Amount drawn at quarter end \$A'000
<i>Note: the term "facility" includes all forms of financing arrangements available to the entity.</i>		
<i>Add notes as necessary for an understanding of the sources of finance available to the entity.</i>		
7.1 Loan facilities	0	0
7.2 Credit standby arrangements	0	0
7.3 Other (please specify)	0	0
7.4 Total financing facilities	0	0
7.5 Unused financing facilities available at quarter end		0
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.	

8. Estimated cash available for future operating activities	\$A'000
8.1 Net cash from / (used in) operating activities (item 1.9)	(375)
8.2 Cash and cash equivalents at quarter end (item 4.6)	2,157
8.3 Unused finance facilities available at quarter end (item 7.5)	0
8.4 Total available funding (item 8.2 + item 8.3)	2,157
8.5 Estimated quarters of funding available (item 8.4 divided by item 8.1)	5.75
<i>Note: if the entity has reported positive net operating cash flows in item 1.9, answer item 8.5 as "N/A". Otherwise, a figure for the estimated quarters of funding available must be included in item 8.5.</i>	
8.6	If item 8.5 is less than 2 quarters, please provide answers to the following questions:
8.6.1	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?
	Answer:
8.6.2	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?
	Answer:
8.6.3	Does the entity expect to be able to continue its operations and to meet its business objectives and, if so, on what basis?
	Answer:
<i>Note: where item 8.5 is less than 2 quarters, all of questions 8.6.1, 8.6.2 and 8.6.3 above must be answered.</i>	

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.

Date: 31 January 2022
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Authorised by: The Board of Directors
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(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 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 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.
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.