

2 September 2025

Procurement of upgraded microbial cellulose batch to advance Nullarbor™ pilot production program

Highlights:

- **Production of an upgraded microbial cellulose (“MC”) batch is underway – expected to complete in late October or early November**
- **MC will then be supplied to pilot production facility operated by co-development partner Birla Cellulose for transformation into Nullarbor™ fibres**
- **Next phase of production follows collaboration with supply partner, HGB, to modify washing and treatment process so the transformed MC is immediately usable as feedstock in India for conversion into lyocell fibre (previously further pre-processing was required)**
- **Works programs with HGB also resulted in improvements to the MC specifications to better match the requirements for commercial lyocell production**
- **Works follow recent engagement in China between CEO & MD, Andrew Moullin, and senior HGB personnel, which included a tour of HGB’s facilities and oversight on production**
- **Mr Moullin plans to travel to India in the coming weeks for discussions with current and potential collaborators – providing another opportunity to solidify commercial strategy**
- **Nanollose is now focused on commercial analysis, with an emphasis on economic, and risk-weighted upscaling towards commercial production and revenue generation**
- **Nanollose’s innovative eco-friendly materials are currently on display at the National Gallery of Victoria and will be modelled throughout September at the “Circular in the Square” event in Perth.**

Advanced biomaterials company Nanollose Limited (ASX: NC6) (“Nanollose” or the “Company”) is pleased to advise production of an upgraded batch of microbial cellulose for the next phase of pilot production of Nullarbor™ fibres in collaboration with Birla Cellulose is underway.

Production follows procurement from Hainan Guangyu Biological (“HGB”), the Company’s supply partner, as well as a period of close consultation with the group to refine and optimise the current supply chain. This has led to HGB modifying the initial washing and treatment of microbial cellulose to produce material that is immediately usable in the lyocell process at Birla, India, without the need for further pre-processing

Production is expected to complete in late October or early November. The batch will then be shipped to Birla Cellulose’s production facility in India for its transition into Nullarbor™ fibres.

Ongoing work to optimise manufacturing with HGB:

CEO & Managing Director, Mr Andrew Moullin, recently travelled to Haikou, China. During the visit, he oversaw production, toured HGB's facilities, and advanced commercial discussions with HGB's founder and CEO, as well as other senior leaders.

This visit followed ongoing work with HGB, which has significantly improved the specifications of the microbial cellulose being used in production. This was achieved by reducing the levels of trace metals, which can be problematic for the lyocell process. It's also resulted in optimisations to the viscosity and solubility of the microbial cellulose - essential parameters for commercialisation.

The Company expects the resulting improvements will remove additional processing requirements in India and facilitate the incorporation of higher amounts of microbial cellulose in Nullarbor fibres at scale. Work with HGB to further refine the process is ongoing, with a focus on cost reduction, yield, and environmental impact, in line with the Company's objective to scale to commercial volumes.



Images: Mr Andrew Moullin, Mr Boon Tan, and Dr Chunyan Zhong (HGB's CEO) at HGB's facility in Haikou, China

Ongoing work with Birla Cellulose:

Since commencing its long-term co-development process with Birla Cellulose, Nanollose has completed three successful pilot production runs at Birla's manufacturing facility, which now total over a tonne of fibre: 800kg of Nullarbor-20™ and 150kg of Nullarbor-30™ for the textiles market, and 110kg of Nufolium-20™ for non-woven fabric applications.

Quantities of these fibres have since been sent to several collaborators in the global manufacturing supply chain and have been converted into yarns, fabrics, and garments for testing and evaluation.

Further highlighting fibre utility, Nanollose recently completed a successful production run of a batch of 70 small blankets incorporating Nullarbor-20 fibre as part of a collaboration with Waverley Mills Pty Ltd, Australia's premier woollen mill (*refer ASX Announcement: 28 April 2025*).

Through extensive testing carried out to date with Birla Cellulose, a subsidiary of global manufacturing conglomerate Grasim Industries, Nanollose is targeting commercial scale for its sustainable fabric technology in the fashion and textiles industry. The next stage of Nanollose's progress will be rigorous risk-weighted analysis of various options for commercial scaling, and associated feasibility studies, with a distinct focus on delivering first revenue and value accretive partnership or licencing opportunities for shareholders.

To expedite this stated strategy, Mr Moullin will travel to India in the coming weeks to meet with several companies relevant to Nanollose's plans to upscale from pilot to commercial production.

Nullarbor on display:

In April, Nanollose successfully completed its first pilot production of a finished consumer product incorporating Nullarbor fibre (see ASX announcement dated 28 April 2025). In collaboration with Waverley Mills, Australia's premier woollen mill, 70 blankets were manufactured from a yarn blended of 30% Nullarbor-20 and 70% Australian merino wool. The project demonstrated seamless integration of Nullarbor with existing manufacturing equipment, validating its compatibility with premium protein fibres such as wool and reinforcing its versatility across high-value textile applications.

Now, excitingly, one of those Nullarbor blankets, and a Lee Mathews-designed top made from Nullarbor fibre, have been selected and are currently on display in the National Gallery of Victoria's exhibition entitled "Making Good: Redesigning the Everyday".

In similar news, several items made from Nanollose's proprietary materials will be on display from next week at the "Circular in the Square" event in Raine Square, Perth, which runs from 1 – 26 September. These items include a dress made of Nullarbor denim, from Nanollose's collaboration with Orta, a Lee Mathews-designed Nullarbor top, and an outfit made from Nanollose's animal and plastic free 'vegan leather'.

Management commentary:

Nanollose CEO and MD, Mr Andrew Moullin, said: *"The Company's most recent trip to China provided an opportunity to meet the team at HGB, see our pilot run in progress, and witness the output of significant hard work and cooperation between our organisations ahead of the next phase of commercial production. Pleasingly, the visit has generated several new lines of enquiry and potential avenues to advance to commercial scale. Work to advance these negotiations and other manufacturing processes is ongoing, which will provide a good foundation for planned discussions in India with Birla and other counterparties. We are confident that these will further illuminate commercial pathways for Nanollose."*

Nanollose Executive Chairman, Dr Wayne Best, said: *"We are pleased to confirm the order of this upgraded batch of microbial cellulose, which follows an extensive period of collaboration and hard work alongside our supply partners HGB to achieve product improvements that will optimise the downstream manufacturing process. As we continually refine the technology to enable the production of larger batches, these product improvements mark an important development in connection with our objective to expand the manufacturing process to achieve commercial scale. We look forward to providing more updates to highlight how these improvements enhance the next pilot production run with Birla Cellulose in the coming months."*

[ENDS]

AUTHORITY AND CONTACT DETAILS

This announcement has been authorised by the Board of Directors of Nanollose.

For further information, please contact:

Andrew Moullin

CEO & Managing Director

Email: andrew.moullin@nanollose.com

Phone: 08 9389 3120

Henry Jordan

Six Degrees Investor Relations

Email: henry.jordan@sdir.com.au

Phone: 0431 271 538

ABOUT NANOLLOSE

Nanollose Limited (ASX: NC6) is a leading biomaterials company commercialising scalable technology to create fibres, fabrics and other novel materials with minimal environmental impact. Nanollose's, eco-friendly fermentation process can use agricultural waste and by-products to produce cellulose, a versatile raw material traditionally produced from trees via the wood pulping process. The company then uses this 'Tree-Free' cellulose as an input for its range of innovative biomaterials including its Nullarbor™ fibres, MicroGel™ horticultural medium, and its emerging animal-free and plastic-free leather-like materials.

Nanollose filed a joint patent application with strategic partner, Birla Cellulose, for its high tenacity, Tree-Free Nullarbor lyocell fibre in 2021. Work has now moved out of the laboratory and into Birla Cellulose's pilot production facilities in India where we have completed three successful pilot production runs to date totalling over a tonne of fibre, 800kg of Nullarbor-20™ and 150kg of Nullarbor-30™, and 100kg of Nufolium-20™. Quantities of these fibres have since been sent to several collaborators and been converted into yarns, fabrics, and garments for testing and evaluation, prior to potential uptake by partners.

Nanollose Investor Hub:

We invite you to use our Investor Hub for any questions about this announcement or other matters regarding Nanollose. This forum offers an opportunity to submit questions, share comments, and view video summaries of key announcements.

To access the Nanollose investor hub go to <https://investorhub.nanollose.com/>