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Clean TeQ Subsidiary NematiQ sells Graphene Membranes into the Hemp Processing Market

Highlights:

- NematiQ secures first commercial sale quantity for hemp processing (botanical extraction market), valued at AUD 65,000
- 12 months of testing and customer-led product development led to the specification of NematiQ membranes for the dewaxing stage in the CBD production process
- NematiQ has transitioned into the market education and commercial sales phase, following successful development of its Graphene Membrane products in multiple markets including botanical extraction, drinking water filtration, wastewater treatment and industrial separations.

Clean TeQ Water Limited (ASX: CNQ & OTCQX: CNQQF) is pleased to announce that its 100%-owned subsidiary, NematiQ, has secured its first significant sale, valued at AUD 65,000, to Molecular Forces Consulting LLC (“Molecular Forces”), a leading company in the USA, providing equipment to the botanical extraction sector.

This sale highlights the application of NematiQ’s Graphene Membranes in the botanical extraction sector, notably in hemp processing. Following 12 months of testing and customer-led product development, Graphene Membranes have been shown to withstand the chemicals involved in these processes, achieving enhanced performance in the dewaxing stage with fluxes multiple times higher than existing filters. The successful demonstration of the technology has led to the initial sale and the deployment of Graphene Membranes into this market through Molecular Forces.



NematiQ spiral wound membranes for the botanical extraction industry

Zev Feinstein, founder of Molecular Forces Consulting LLC, commented, *“We are very excited about deploying NematiQ’s Graphene Membranes as the performance is substantially higher than other membranes being used for the industry. We have seen dewaxing flowrates exceed four to five times higher than other membranes for supercritical carbon dioxide extraction and even higher for ethanol extraction processes. This is a gamechanger and will allow for higher production capacity across the industry as this has been a key bottleneck associated with deploying membrane filtration as the gold standard in this part of the CBD and THC production process from hemp.”*

The hemp extraction equipment market is estimated to be US\$45.5m in 2022¹, with a 12.8% CAGR. Filters in this sector have a faster replacement rate in comparison to many other industries. The majority of the market are not using membrane separations, and as such a shift to membrane separations will increase the value share of the equipment supply market in collaboration with Molecular Forces.

Over the past year, NematiQ has transitioned from the development phase to focusing on educating the market and commercial sales. Our Graphene Membranes stand out due to their unique properties, such as high flux, the ability to reject organics without rejecting salts, and the anti-fouling nature of the membrane surface that results in lower fouling compared to conventional polymeric membranes.

In other applications such as drinking water treatment, the Graphene Membrane has been very successful in trials for the removal of naturally occurring organic matter (NOM) in drinking water applications. The Graphene Membrane can remove organics without removing the beneficial salts resulting in lower energy use, higher water recovery and more environmentally friendly routes for by-product disposal.



Water Source Australia system using NematiQ’s membrane

¹ <https://www.factmr.com/report/cbd-extraction-equipment-market>

The market penetration of NematiQ's Graphene Membranes is increasing, with sales in the drinking water sector for customers in Australia and Europe, and into the reverse osmosis pre-treatment market with some of the world's largest manufacturers for testing in their flowsheets.

David Menzies, CEO of NematiQ, expressed enthusiasm about the diverse sectors recognizing the value of Graphene Membranes. *"The achievements to date reflect the broad interest in our technology and its potential to redefine water purification standards. We are committed to continuing our work with customers towards a more sustainable and efficient future in water treatment."*

Other initial Graphene Membrane sales have been achieved across diverse sectors for testwork and piloting, including surface water, groundwater, dye recovery, greywater, carwash wastewater, and industrial filtrations. Other major ongoing trails include whey concentration for a major international dairy company, wastewater treatment for a large food and beverage company, wastewater treatment in the PFAS industry, and wastewater treatment trails with a large Australian Water Authority.

About NematiQ

NematiQ is a 100% owned subsidiary of Clean TeQ Water, and is headquartered in Melbourne, Australia. NematiQ is at the cutting edge of direct graphene nanofiltration technology and is the first company in the world to produce Graphene Membranes at commercial scale. Unlike "graphene doped" or "graphene assisted" membranes where the hydrophilic properties of graphene assist with increasing flux, NematiQ's Graphene Membranes use graphene oxide as the primary filtration mechanism. NematiQ's innovative and patented manufacturing process means high-quality graphene nanofiltration membranes and modules are now affordable.

About Molecular Forces Consulting LLC

Since its establishment in 2018, Molecular Forces Consulting LLC has strategically positioned itself as a pioneer within the Organic Solvent Nanofiltration (OSN) market by unveiling its X-Spiral range of OSN products. Identifying a previously unmet need for effective solvent recovery and product quality enhancement solutions, the company embarked on a rigorous development process. to fill the significant gap in the market and sell equipment into the botanicals extraction industry.

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This announcement is authorised for release to the market by the Board of Directors of Clean TeQ Water Limited.

About Clean TeQ Water Limited (ASX: CNQ & OTCQX: CNQFC) – Clean TeQ Water is a global technology leader headquartered in Melbourne, Australia, specialising in providing economic and environmentally sustainable solutions to address critical issues related to freshwater scarcity, mine tailings, and metal recovery. While the company has traditionally implemented projects using the engineering, procurement, and construction (EPC) approach, there is a strategic shift towards projects that generate annuity income or equity through

technology license agreements to provide a more sustainable and long-term business model. Clean TeQ Water's core markets include water and wastewater recycling, lithium production, and the remining and rehabilitation of mine tailings. These markets reflect a commitment to addressing environmental challenges and promoting responsible resource management. The company has a presence in various locations, with offices in Melbourne, Perth, Darwin, Leeuwarden (Netherlands), Beijing, and Tianjin. Additionally, Clean TeQ Water has established partnerships in Africa and Latin America, showcasing its commitment to addressing global challenges and collaborating with stakeholders on an international level.

For more information about Clean TeQ Water please visit www.cleanteqwater.com.

FORWARD-LOOKING STATEMENTS

Certain statements in this news release constitute "forward-looking statements" or "forward-looking information" within the meaning of applicable securities laws. Such statements involve known and unknown risks, uncertainties and other factors, which may cause actual results, performance or achievements of the Company or industry results, to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements or information. Such statements can be identified using words such as "may", "would", "could", "will", "intend", "expect", "believe", "plan", "anticipate", "estimate", "scheduled", "forecast", "predict" and other similar terminology, or state that certain actions, events or results "may", "could", "would", "might" or "will" be taken, occur or be achieved. These statements reflect the Company's current expectations regarding future events, performance, and results, and speak only as of the date of this new release.

Statements in this news release that constitute forward-looking statements or information include, but are not limited to, statements regarding: the effectiveness and cost effectiveness of Clean TeQ Water's proprietary water treatment processes and the potential for the Company to expand its sales of water treatment plants. Readers are cautioned that actual results may vary from those presented. All such forward-looking information and statements are based on certain assumptions and analyses made by Clean TeQ Water's management in light of their experience and perception of historical trends, current conditions and expected future developments, as well as other factors management believe are appropriate in the circumstances. These statements, however, are subject to a variety of risks and uncertainties and other factors that could cause actual events or results to differ materially from those projected in the forward-looking information or statements including, but not limited to, unexpected changes in laws, rules or regulations, or their enforcement by applicable authorities; the failure of parties to contracts to perform as agreed; changes in commodity prices; unexpected failure or inadequacy of infrastructure, or delays in the development of infrastructure, and the failure of exploration programs or other studies to deliver anticipated results or results that would justify and support continued studies, development or operations.

Readers are cautioned not to place undue reliance on forward-looking information or statements.

Although the forward-looking statements contained in this news release are based upon what management of the Company believes are reasonable assumptions, the Company cannot assure investors that actual results will be consistent with these forward-looking statements. These forward-looking statements are made as of the date of this news release and are expressly qualified in their entirety by this cautionary statement. Subject to applicable securities laws, the Company does not assume any obligation to update or revise the forward-looking statements contained herein to reflect events or circumstances occurring after the date of this news release.