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## NematiQ signs MOU with Schreurs & Sons for Groundbreaking Water Recycling Technology

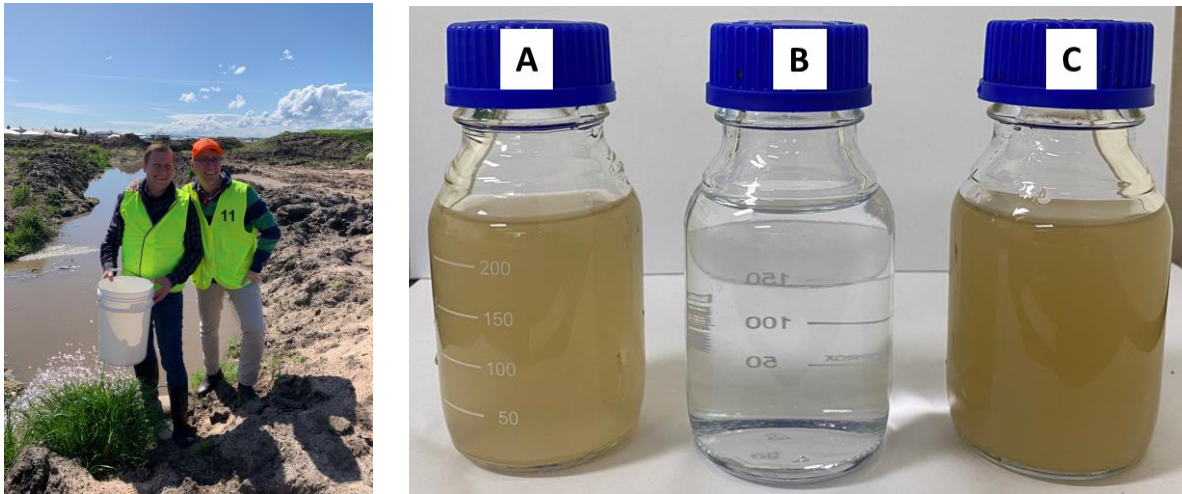
MELBOURNE, Australia – NematiQ Pty Ltd, a 100% owned subsidiary of Clean TeQ Water (ASX: CNQ) has signed a Memorandum of Understanding (**MOU**) with Schreurs & Sons Pty Ltd (**Schreurs**), one of Australia's largest and most prominent celery and leek growers, to demonstrate the NematiQ Direct Graphene Membrane Nanofiltration technology to treat and recycle process and surface water for use in their manufacturing and packaging facility in Clyde, Victoria.

Schreurs grows and processes celery and leeks for both the domestic and export market. In processing, water is used for washing, cutting, and disinfecting the greens. Considerable amounts of water are used in the process and Schreurs are committed to reducing the use of fresh water by increasing the use of high-quality recycled water.

Direct Graphene Membrane Nanofiltration technology uses the unique properties of graphene oxide to filter bacteria, viruses, and organics at a molecular weight cut-off of more than 800 Daltons. The Graphene Membrane can achieve very high flux rates at low pressure resulting in energy savings and therefore reduced greenhouse gas emissions for users in comparison to reverse osmosis (**RO**) and traditional nanofiltration (**NF**). The graphene oxide coating is the active surface layer of the membrane providing anti-fouling properties which increases membrane life and reduces the energy consumption usually seen when polymeric membranes become fouled.

Preliminary testing has been concluded on waters collected onsite pre-treated with only a 50-micron particle filter to remove larger particles from the feed water. This water was subsequently processed through direct filtration using NematiQ's laboratory Graphene Nanofiltration system in a crossflow format yielding excellent results.

The resulting water quality test work showed substantial improvement in all major water quality parameters providing a safe water for recirculation within the facility. Turbidity was reduced by 99.9% from 594 mg/L down to 0.6 mg/L, dissolved organics as measured by COD was reduced by 92.5% from 134 mg/L to <10 mg/L and Total Coliforms (bacteria) was reduced by 100% from >2000 MPN/100mL down to 0 MPN/100mL. The results provide the basis for NematiQ and Schreurs & Sons to enter a MOU for water recycling.



**Fig 1.** Dr David Menzies and Chris Schreurs collecting dam water (left), and an image of the feed water (A), the Graphene Membrane filtered permeate water (B) and the rejected wastewater (C).

NematiQ and Schreurs aims to complete a larger scale pilot trial prior to the end of 2022, with the results informing a technical and economic evaluation of the technology. The pilot trial will make use of either 4040 or 8040 sized Graphene Nanofiltration modules to process larger volumes of water continuously of between 0.25 to 1 m<sup>3</sup> per hour. If successful, this may lead to a full-scale plant being designed and installed for the Schreurs & Sons food processing facility. The total water used at Schreurs is more than 40 m<sup>3</sup> per hour equating to more than 500 m<sup>3</sup> per week.

Dr David Menzies, NematiQ CEO, commented *“We are pleased to have the opportunity of working with Schreurs with our ground-breaking technology to increase water recycling. We believe that our Direct Graphene Membrane Nanofiltration process can provide our customers with best in class economic and environmental outcomes. The outcome of this MOU will move the technology from Technology Readiness Level 6 up to Technology Readiness Level 8/9, meaning the business is in the final commercialisation phase.”*

Willem Vriesendorp, Clean TeQ Water CEO, said *“After eight years of internal development, it is satisfying to see real interest from Australian companies in recognizing the benefits that the NematiQ Graphene Membrane technology can bring to their operations. The market for the technology is very large and commercial pilots are a key milestone for technology commercialisation.”*

Chris Schreurs, Schreurs & Sons Director, commented *“We are committed to reducing our energy and water footprint to be a leader of sustainable production in the food sector. The results from the NematiQ filtrations of our wash waters are very exciting.”*

The MOU is subject to standard terms and conditions that are customary in an agreement of this nature. If the parties are unable execute a Contact of Sale or Partnership Agreement within 90 days, the MOU will lapse. Each party will bear separately and solely its own costs and expenses incurred in connection with the execution of the arrangements laid down in this MOU, except as otherwise mutually agreed in writing. Technical third-party costs (e.g., analytical testing) shall be split 50% between the Parties.

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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)** – Based in Melbourne, Australia, Clean TeQ Water provides innovative metals recovery and water treatment solutions for governments and companies. Our sectors of focus include municipal wastewater, surface water, industrial wastewater and mining wastewater. Clean TeQ Water has offices in Melbourne, Perth, Beijing and Tianjin, and partners in Africa and Latin America. We provide turnkey metals recovery and water treatment plants everywhere in the world.

For more information about Clean TeQ Water please visit [www.cleanteqwater.com](http://www.cleanteqwater.com)

**About NematIQ Pty Ltd**

NematIQ Pty Ltd is a wholly owned subsidiary of CleanTeQ Water (ASX:CNQ). NematIQ has developed and is commercialising a novel Graphene-Oxide Membrane for water filtration. NematIQ is headquartered in Melbourne and is focussed on wastewater and surface water treatment.

For more information about NematIQ, please visit [www.nematiq.com](http://www.nematiq.com).

**About Schreurs & Sons**

Schreurs & Sons is a third-generation farming business that is 100% Australian family-owned and operated. Schreurs specialise in celery, leek and baby leaf lines (including spinach, rocket and snow pea tendrils), and take pride in delivering high quality products to our customers year-round. With five properties, spanning over 1,000 acres, we are one of the largest suppliers of celery in Australia, with both local and international customers.

For more information about Schreurs & Sons, please visit [www.schreurs.com.au](http://www.schreurs.com.au).

**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. 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.