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ASX Announcement

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Quarterly Report - Update

Operation Report for Quarter Ended 30 September 2021

During the quarter the Company has continued testwork on products under development with the following results.

Hydroplasma Unit

Initial evaluation of the disinfection capabilities of Purifloh's proprietary Hydroplasma technology has been completed successfully. The Client, a leading US based White Goods manufacturer is fully satisfied with the results.

Following this initial success, the Client and Purifloh have now defined test protocols and success criteria for the second stage testing program with a view to integrating the Purifloh's unit into the next generation of consumer white goods with water recycling capabilities. This second stage testing is currently underway.

With success at the second stage testing, Purifloh may be able to deliver technology to enable water disinfection and purification to allow grey water from wash and rinse cycles to be reused. There are over 1 billion washing machines and dishwashers in households worldwide. The sales potential is substantial, as is the environmental benefits through water savings and reduction in grey water discharge.

Microplastics Application for Hydroplasma Unit

As part of the testwork referred above the Company has found that the hydroplasma unit has provided strong early indications of enabling a significantly more effective filtering solution for microplastics from washing machine use.

Microplastics are estimated to account for 1.3 million metric tons – about 11%— of total ocean plastic pollution. Microplastics are microbeads used in personal care products such as face scrubs and body washes as well as arising from the breakdown of plastic fibers caused when synthetic textiles are washed.

The most effective method of containment is direct within washing machines and as such France has legislated all washing machines from 2025 must be capable of eliminating microplastics.

Recent studies by the University of Plymouth tested the effectiveness of various devices¹ at preventing microfibre release from laundry. The study showed that results of 80% can be achieved, though the current leading solution in the market place removes less.

First ACERT Units installed and validated in-situ in hotels in Australia and the USA.

Purifloh has successfully installed, operated and validated its ACERT units within hotel settings in both Australia and the US.

Taking advantage of extended hotel closures and room vacancies during COVID lockdowns, the Company has now validated ACERT (Air Conditioning Environmental Remediation Treatment) units in a small hotel in Melbourne whilst integrating a fixed ACERT device into the Air Conditioning unit of a luxury chain hotel in Detroit.

The results of these ‘in-vivo’ trials are consistent with the laboratory pilot validations. Purifloh's ACERT device during a 15 minute automated daily cycle can consistently destroy greater than 99.9% of challenge pathogens commonly found on aircon coils. This is within the criteria of applicable guidelines

Notably and critically for market development results confirmed:

- no by-products were detected during and after the disinfection cycles;
- the unit is fully compatible with all airconditioners and airconditioner duct surfaces; and
- less than 0.05 kW*hr use per cycle make the unit one of the greenest disinfection technologies by way of power consumption available.

¹ <https://www.plymouth.ac.uk/news/study-shows-devices-can-reduce-fibres-produced-in-laundry-cycle-by-up-to-80>

The risk of acquiring disease in hotels via coils of air conditioning units is about 1,000 times greater than through high touch surfaces. Disinfection of air-conditioning units is top priority in preventing pathogen transmission in hotel settings. To mitigate these risks, the US CDC and the WHO recommend avoiding air recirculation altogether. The PurifloH disinfection strategy should assist hotels worldwide where using non-recirculated air (relying on fresh air only) is not a viable option.

The next steps include finalising the independent validation of the disinfection claims in a GLP-certified laboratory, engaging industry partners and scaling up manufacturing capabilities.

Osmoflo

The research collaboration between PurifloH and Osmoflo will first evaluate PO3 technology capability to reduce biological and chemical contaminants in source water to minimise biofouling of reverse osmosis membranes.

The necessary testing equipment has arrived and the testing protocols have been approved.

Testing has been ready to commence during the quarter, but has been curtailed due to Covid lockdowns between Victoria and South Australia. It is anticipated to commence in late November 2021 provided the State borders are re-opened between the States.

Strategic Review

The company continues to deliver effective prototype disinfection/purification results and cultivate relationships with key OEMs in the air and water purification. It acknowledges a need to improve commercial execution. To assist it has engaged an industry expert in the area of product development and commercialisation to advise on strengthening the company's commercial capabilities and outcomes.

The strategic advice will include:

- informing capability and capacity to more effectively execute on final stage product development.
- advice on key market opportunities; and
- an aligned industry partnership development plan that would drive more effective industry partner co-development support and market traction.

Comment on Appendix 4C – Quarterly Cashflow Report

- The Company notes that it has continued to operate on funds drawn down from its Dilato facility. It has increased this facility after the recent quarter by an additional \$2M which provides suitable cover for its development plans over the next 18 months.
- Funds spent during the quarter were on design consultancies, Intellectual Property patent activities, legal fees associated with various agreements as identified and Director and general consulting fees.
- Director fees for the quarter as identified in the Appendix 4C totalled \$68,751 for consulting work completed by Directors within the business.

This ASX announcement was authorized and approved by the Board of Directors of Purifloh Limited.

End

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