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### ASX Announcement ABN 11 124 426 339

PURIFLOH

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# **Quarterly Report - Update**

### Sales, Marketing and Production of PuriflOH products

During the quarter PurifIOH has advised of the ongoing launch of two products, being:

1. The Air Conditioning Environmental Remediation Treatment ("ACERT"); and

2. The whole of room air purifier ("WRAP").

The ACERT unit is an elegant and inexpensive solution recently pioneered by Dr Alex Sava and Vigneswaran Appia as a comprehensive answer to the known problems of pathogen harbouring within air conditioners. These hard-to-access sites are the main suspect of airborne transmissions between guests and guests-to–staff.<sup>i</sup> This technology, based on the core FRG unit, is currently undergoing patent protection by PuriflOH.

The use of the ACERT is intended for all sites identified by The American Society of Heating, Refrigerating and Air-Conditioning Engineers ("ASHRAE") and the US CDC Centre for Disease Control ("US CDC") as potentially harbouring pathogens in air handling systems.

To that end, the Company has received in Australia its initial order of units for deployment within various sites identified by the Company, including sites identified by Aspen Medical Technologies as well as hotel groups in Thailand, USA and Australia.

It is important to note that the units, whilst being deployed into operational sites, are still pilot prototypes to finalise installation and disinfection operating procedures.

The core FRG unit is utilized in both ACERT and WRAP and is relatively interchangeable between the two. The initial run of core FRG units has been undertaken by Somnio under guidance by Industry Star of Detroit who are working through the issues associated with large scale and continuous manufacturing.



The cabinetry and control system associated with the WRAP unit has been undertaken by Design and Industry  $("D+I")^{ii}$ . The base design concept has been concluded with PuriflOH now seeking further modifications.

The WRAP unit is initially targeting institutional markets (as opposed to consumer markets) as, in conjunction with the ACERT system, it offers a compelling air disinfection and purification strategy.

In May 2021, PurifIOH announced that it had entered into a partnership by way of a Heads of Agreement with Aspen Medical<sup>III</sup> for the supply of disinfection technologies as noted above. The objective is to deploy the FRG technology within broader infection control regimes for indoor spaces where Aspen has considerable expertise and capability.

The initial product supply to Aspen will provide for field pilot sites. Whilst this will not generate material revenue or costs, it will greatly assist the development of a more comprehensive deployment plan and commercial agreement.

In June 2021, the Company announced that it had entered a non-binding Heads of Agreement with Osmoflo Water Management Pty Ltd<sup>iv</sup> ("Osmoflo").

Osmoflo was anticipated to commence evaluating the PO3 FRG based water treatment technology within its R&D centre "The Edge" in Burton, South Australia during July 2021. Following delays due to COVID related border closures and lockdowns, the testwork is about to begin this quarter.

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

PurifIOH expects the preliminary evaluations to be concluded by the end of the calendar year, which may lead to commercial activities and additional agreed fields of research.

### **Technology Development**

The Company continues to work with Somnio Global on the ongoing evolution of the core FRG technology,.

A recent technology development is under the working title of Hydroplasma, and involves the direct interaction of plasma with water, eliminating the need for a graphite counter electrode. Initial results have been promising and indicate the technology may be capable of decontaminating water from pollutants. This is due to Hydroplasma generating different chemical actives compared to FRG technology.

The technology is intended primarily for small scale applications, though the potential for larger scale industrial applications is significant.

Hydroplasma has attracted interest from certain OEM manufacturers and the Company has commenced preliminary evaluations requested by a US-based white goods OEM that relates to recycling of household



water. Key parameters to evaluate are disinfection rates, treatment times, and life span of the proposed solutions.

The joint tests will also evaluate the ability of Hydroplasma to remove microplastics from household grey and waste water.

The Company has previously announced that it had independently validated the FRG's capability to destroy resistant spores, bacteria, viruses and fungi, including the MS2 bacteriophage in the airborne aerosols. Consequently, the Company clarified that the technology had not been tested on the surface-bound SARS-CoV-2 surrogates as per TGA prescribed methodology. The Board has now chosen to rectify this issue and is planning to validate the claim at a suitable GLP-accredited laboratory.

### **Board Changes**

During the quarter the Company announced the resignation of Professor Pravansu Mohanty and the appointment of Dr Alex Sava to the Board of Directors.

## 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 recently requested additional funding and has accordingly received \$200,000 from its facility.

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 \$20,167.40.

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

End



## About the PurifIOH Technology

PurifIOH's core technology, known as Free Radical Generation (FRG), is unique is its ability eliminate a wide range of contaminants (chemicals, hydrocarbons, viruses, bacteria, moulds, toxins, etc.) that are typically found in contaminated air, water and surfaces.

The unique capability of the FRG system relies on.

- UV light generation
- Charged electrons forming plasma streams
- Generation of 'free radicals' including the highly effective hydroxyl (OH) radical.

PurifIOH technology can be adopted to selectively increase or decrease the production of various oxygen and hydroxyl based Free Radicals and target specific contaminants without leaving toxic by-products. This permits customisation for different environments and applications.

<sup>i</sup> <u>https://www.agcoombs.com.au/news-and-publications/advisory-notes/modifying-hvac-systems-to-reduce-sars-</u> <u>cov-2-transmission/</u>

<sup>ii</sup> <u>www.design-industry.com.au</u>

iii <u>www.aspenmedical.com</u>

www.design-industry.com.au