



ABN 11 124 426 339  
Level 3, 2-4 Ross Place, South Melbourne, VIC 3205  
P +61 (3) 9673 9690 F +61 (3) 9673 9699  
[www.purifloh.com](http://www.purifloh.com) E [corporate@purifloh.com](mailto:corporate@purifloh.com)

23 January 2019

ASX Announcements  
4<sup>th</sup> Floor  
20 Bridge Street  
Sydney, NSW, 2000

Dear Sir,

### Market Update

Purifloh Limited ("PO3" or "Company") is pleased to provide the following update on activities.

- Tuberculosis Bacteria ("TB") trials well underway in India
- Ongoing work in ancillary equipment to further advance recreational water Treatment
- Somnio advise of significant reduction in the manufacturing cost of FRG System

#### 1. Indian Trials on Tuberculosis Bacteria

The Tuberculosis Bacteria ("TB") trials commenced earlier in January at the Government General and Chest Hospital of Hyderabad.

Testing protocols have been designed that initially require the determination of existing levels of TB in the Hospital environment. The initial baseline sampling and analysis exhibits a high level of airborne mould that grows rapidly when cultured, and thus supersaturated the baseline samples, impacting the ability to accurately count background TB levels. Typically, mould grows rapidly in 2-3 days, while TB grows slowly in 8-10 days in a culture medium.

Accurate baseline counts are critical to the integrity of the testwork and require resolution before progressing to the efficacy trials which will incorporate the Free Radical Generator ("FRG"). Somnio has informed the Company that there have been modifications to the testing protocols to overcome the challenge of the airborne mould and the early indications are promising. Trials continue and we expect the issue to be resolved shortly.

It is worth noting that the FRG is capable of destroying mould. Hence these trials should also demonstrate FRG's ability to significantly improve the hospital environment through the destruction of mould, in addition to the anticipated destruction of TB.

The Company remains fully expectant that this testwork will produce successful results. Success would be measured by the level of reduction in airborne TB (and the associated airborne mould) and will provide the first in situ results for the FRG in an operating medical environment. This will significantly enhance the Company's

For personal use only

value proposition in air purification, whilst setting the stage for entry into the medical segment, for which further information will be released as appropriate.

The Company will release a detailed update on the TB testing as soon as the full results have been received and verified.

## 2. Recreational Water

PO3 has stated that water treatment is a key market and that whilst its ultimate goal is to develop FRG based applications in the global waste water treatment and potable water markets, its initial target market is the recreational water market (ASX: "November Presentation" 1 November 2018).

The Company is targeting recreational water as there are low barriers to entry and substantial opportunity in both the United States and Australia – with the USA providing a target market of 10.5 million residential pools and 340,000 commercial pools.

Further it is evident that demand within the recreational water market is moving away from chlorine, with ozone being an accepted and positive substitute as it provides a vastly superior experience to chlorine as follows:

- Less smell, irritation (skin and eyes) and bleaching;
- Better control of micro-organisms, including the ability to eliminate micro-organisms that chlorine cannot – for example cryptosporidium;
- Greater underwater clarity;
- Less infrastructure damage – notably in indoor heated pools.

The Company is seeking to present a total solution to the recreational water industry with the FRG system at its core. The framework for full system performance seeks to address challenges that are common to the industry, the solutions to which present as further opportunities to the Company.

To that end, the application development team is now improving key ancillary equipment designed to complement the FRG both as an integrated system within new pool equipment and also as a retrofit treatment system.

An example would be the rate at which the ozone gas stream is mixed with water, as improving this mixing efficiency will lead to reduced wastage, reduced footprint and a better commercial outcome. Another consideration to improving ozone utilization is that oxidizing radicals are relatively benign at the lower levels but legislation in most countries does not allow for their release into the atmosphere. Hence any excess radicals that have not been absorbed within the water require destruction before release, with a consequent impact on system cost.

Somnio is focused on delivering a total solution and is currently refining the complete product package. A key motivator to this complete solution strategy is the objective to deliver a turnkey and easy to install retro-fit package to the existing installed base of over 10 million pools in the US and Australia, rather than only targeting new installations.

The next step is to conduct a series of field trials that should commence early in the North American spring in Michigan for ease of access to Somnio technicians.

Successful field trials should result in a commercial product available for market.

### 3. Manufacturing

Somnio are constantly reviewing and improving the likely manufacturing costs of the FRG system with the strategy being to drive manufacturing costs lower without compromising the quality of the end product.

Somnio have recently advised PuriflOH that they have achieved further and significant manufacturing cost savings through design adjustments. Such adjustments include materials, equipment design, improved power systems and manufacturing techniques.

A lower cost of production will clearly assist the FRG's market competitiveness whilst improving operating margins. Further reductions are expected when full scale production levels are achieved.

It has been just over 2 months since the Company received the placement funds from Upjohn Laboratories and much positive progress has occurred in that time. Much planning is underway, with research and development programs that were under consideration being carefully accelerated, as outlined in part herein.

Commensurately there is an increased focus on commercialization activities, including set up of US operations, recruitment of key staff and requirements for eventual manufacturing activities.

The Company anticipates ongoing and regular newsflow through 2019.

End

For further information:

Simon Lill (Director)  
Australia  
+ 613 9673 9673

Steve Annear  
USA (Detroit)  
+1 248 567 9616