ASX RELEASE | De.mem Limited (ASX:DEM)

De.mem reports first revenues from commercialisation of new Hollow Fibre Forward Osmosis technology

- **A$ 150,000 of accumulated revenue achieved since licensing of the new technology in March 2018**
- **Ready for commercial scale up with solid customer interest identified**
- **Successful validation of the hollow fibre forward osmosis membrane technology for de-watering of different types of industrial waste water as well as concentration of beverages**

18 June 2019: Water and waste water treatment company De.mem (ASX:DEM) ("De.mem" or "the Company") is pleased to report solid progress of its proprietary technology portfolio with the Company booking accumulated revenues of ~AUD$150,000 from its new hollow fibre Forward Osmosis (FO) membrane technology since the licensing of the technology in March 2018.

The scale-up of this FO technology has now commenced. Whilst the initial revenues are pleasing and provide an excellent validation for the commercial readiness of the technology, the growing customer interest is even more encouraging. De.mem is currently preparing an industrial solution for this FO technology in response to strong customer interest.

De.mem CEO Andreas Kroell said: "With a minimum cash burn, De.mem has managed to build up a proprietary technology portfolio in record time that is gaining excellent market recognition.

"Our hollow-fibre Forward Osmosis technology is part of this technology portfolio, patent protected and unique in the industry. We have validated it with customers, and are now witnessing very solid interest for larger industrial solutions.

"The addressable market for this technology alone is very large particularly in the industrial waste water treatment and food & beverage sectors in the Asia-Pacific. The IP carries substantial value and it gives De.mem a major strategic advantage. We are building on the growth and uptake of this unique and highly appealing water technology solution.

Forward Osmosis membrane technology background

In March 2018, De.mem licensed a FO membrane technology originally developed at Nanyang Technological University, Singapore ("NTU"), for de-watering applications in industrial waste water treatment.

FO is an osmotic process that uses a semi-permeable membrane to effect separation of water from dissolved solutes. The hollow fibre FO membrane developed by NTU delivers high flux (high concentration of feed), while characterized by low salt back flux (low draw solution leakage).

The technology is easily manufactured and scaled up and applies not only to the industrial waste water treatment segment but also the food & beverage industry. For applications concerning the food & beverage industry, such as the concentration

of fruit juice, milk or other beverages, the company works in partnership with Aromatec Pte Ltd, Singapore, in which De.mem holds a 32% stake.

The use of membrane processes in the food & beverage industry is a very large market which is estimated at US$ 5.8 billion per annum, with the Asia-Pacific region alone accounting for US$ 3.0 billion out of the total (source: BCC Research). For the industrial waste water treatment segment, the technology can be utilized in place of current "Zero Liquid Discharge" processes, which is cited to be worth approx. A$ 400 million per annum (source: ForwardOsmosis Tech).

IMAGE 1) FO de-watering/liquid concentration system delivered by De.mem

Appendix: Pilot Tests – Technical Data

In developing this new technology, the company also concluded key pilot tests using the new membrane. Key results are summarized below.

Industrial waste water treatment segment

De.mem has successfully performed several pilot tests on the concentration of highly contaminated industrial waste water. One such pilot project using waste water from a factory from the flavours & fragrances industry is illustrated further below.

De.mem's technology aims to reduce the volume of certain types of highly contaminated industrial waste water, which can be very expensive to discharge. This type of waste water is often trucked away at costs of up to A$ 600 per ton.

The selected pilot project illustrated as follows shows the de-watering of waste water from a factory from the flavours & fragrances industry. While the feed (raw waste water) contained a COD (Chemical Oxygen Demand) of approx. 19,000 mg/l, De.mem was able to concentrate (reduce) its volume by by a factor of more than 10x, with the COD of the concentrate increasing by a factor of more than 6x. The pilot test implies that a factory could theoretically reduce the volume of its discharge by up to 90%.

The technology is run without external mechanical pressure and minimum power requirements resulting in very low operating cost.

The key parameters are summarized as follows:

Item	Feed (Raw Waste)	Concentrate	Draw Solute
Volume	14 liters (100%)	1.3 liters (9%)	n/a
COD (Chemical Oxygen Demand), mg / l	19,094	121,800	1,946
Turbidy, NTU	572	689	0.98

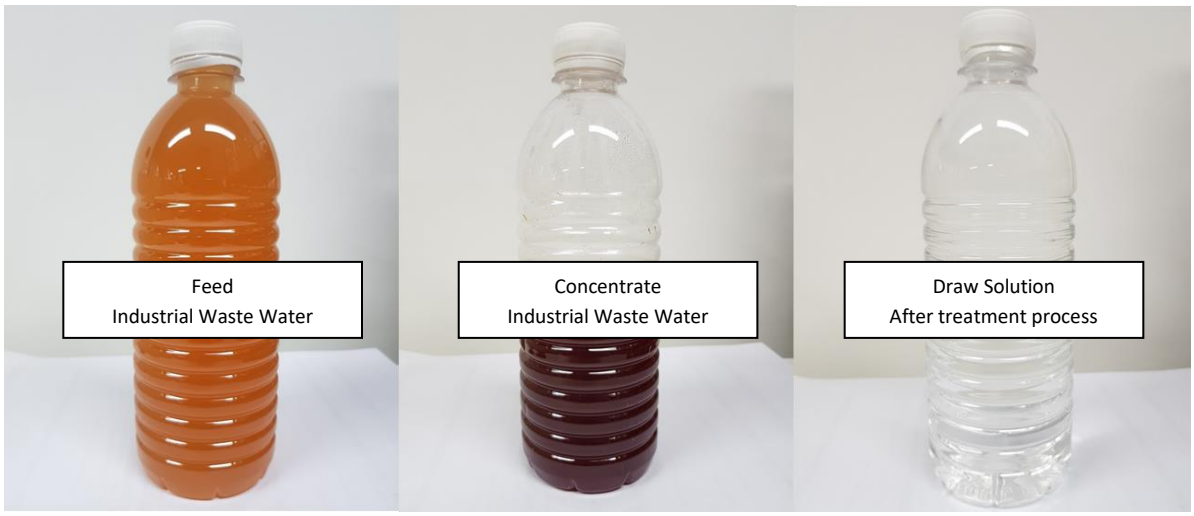

IMAGE 2) Industrial waste water – Feed vs. concentrate and draw solution from De.mem FO

Beverage production segment

In partnership with our joint venture company Aromatec Pte Ltd, Singapore, De.mem has performed several pilot projects on the concentration of beverages, some of them in conjunction with leading players from the international food & beverage industry. One such pilot project on the concentration of fruit juice is illustrated further below.

The new FO membrane provides an alternative concentration technology for beverage manufactures which does not use high temperatures and therefore helps to preserve key ingredients such as nutrients and achieve a more authentic taste profile. Traditional concentration processes often rely on thermal evaporation, which uses heat and hence, does have an adverse impact on nutrient and taste profile of the feed liquid.

The volume reduction can also lead to substantial cost savings during transport of the beverage.

The selected pilot projects illustrated as follows show the use of the De.mem/Aromatec hollow fibre FO technology on standard milk and fruit juice. Milk was concentrated by a factor of 6x; equivalent to a volume reduction or water removal

of more than 80%. The fruit juice was concentrated by a factor of approx. 10x, equivalent to volume reduction or water removal of approx. 90%.

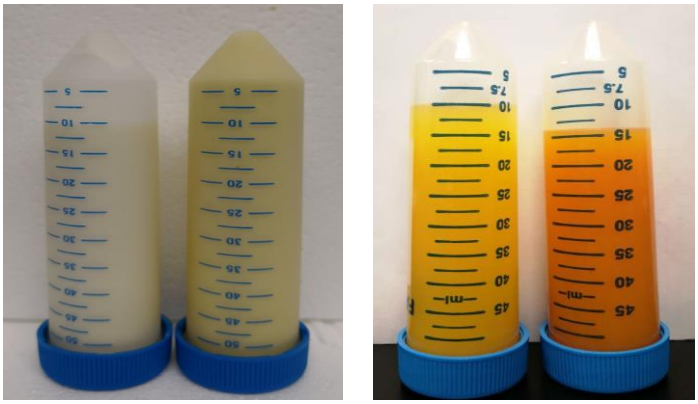

IMAGE 3) Beverage concentration on milk and fruit juice – beverage (feed) on left vs. concentrate on right

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De.mem Limited (ASX:DEM) is a Singaporean-Australian decentralised water and waste water treatment business that designs, builds, owns and operates turn-key water and waste water treatment systems for its clients. The Company operates in the industrial segment providing systems and solutions to customers from the mining, electronics, chemicals, oil & gas and the food & beverage industries and in the municipal and residential segments. De.mem makes use of a portfolio of proprietary hollow fibre membrane technologies, which are commercialized as a key component within the Company's water and waste water treatment systems. Some of the technologies were originally developed by the De.mem's partner in research & development, Singapore's Nanyang Technological University (NTU), and exclusively licensed to the Company. Those include a revolutionary low-pressure hollow fibre nanofiltration membrane and a hollow fibre forward osmosis membrane for de-watering or concentration of liquids. Through its wholly owned subsidiary De.mem-Akwa Pty Ltd (formerly: Akwa-Worx Pty Ltd), De.mem has a strong presence in Australia. De.mem-Akwa has a market reputation for building high quality Australian-made water and waste water treatment systems and has long-term customers in the Australian mining, infrastructure and food & beverage industries. To learn more please visit: www.dememb.com

Forward Looking Statements

Statements contained in this release, particularly those regarding possible or assumed future performance, revenue, costs, dividends, production levels or rates, prices or potential growth of De.mem Limited, are, or may be, forward looking statements. Such statements relate to future events and expectations and, as such, involve known and unknown risks and uncertainties. Actual results and developments may differ materially from those expressed or implied by these forward-looking statements depending on a variety of factors.