

8 December, 2021
Company Announcements
Office ASX Limited
Level 4, 20 Bridge Street
Sydney NSW 2000

COMMERCIAL WATER TRIAL DEMONSTRATES SUCCESSFUL SEPARATION AND REMOVAL OF REGULATED PFAS FROM VARIOUS WASTE STREAMS

- **EGL's foam fractionation technology has demonstrated outstanding results in commercial trials, successfully separating and removing PFAS from liquid waste streams up to 41.5ppb**
- **Consistent results demonstrated with regulated PFAS separated and removed to levels below detection limits in all high-volume low concentrate trials which represents a significant portion of the market**
- **At the highest concentrate trials (c. 40ppb total PFAS) regulated PFAS was removed over 99.4% on the first processing run with trials ongoing on these higher concentrate PFAS waste streams**
- **EGL's technology has considerable advantages against other PFAS removal technologies including being simpler, safer, more versatile and more cost effective**
- **In order to advance commercialisation and support other business development opportunities EGL has received firm commitments for a \$4.75m share placement (before costs) at \$0.175 per share**

The Environmental Group Limited (EGL) is pleased to announce successful results from its commercial PFAS water trial with Reclaim Waste. The trial has been run on various commercial waste streams and liquid waste types containing PFAS at different concentrations. These trials have demonstrated successful separation and removal of regulated PFAS to below detection limits¹ in all high-volume low concentrate trials and very high separation and removal levels of over 99.4% from a first processing run on the highest concentrate trials. The trial plant is capable of treating ~50,000 litres per day and is operating at Reclaim Waste's site in Laverton, Victoria.

These outstanding results follow two years of successful pilot trials with Victoria University which were critical in building understanding and refining the separation process that delivered the excellent results achieved to date in the commercial trial.

Each batch processed in the commercial trial has been laboratory tested and certified as a base line to prove the effectiveness of EGL's technology on separating and

¹ Detection limits being 0.02 parts per billion (ppb)

removing significant volumes of PFAS in contaminated liquid waste. The plant has been successful in the separation of regulated PFAS in both high-volume low concentrate waste streams, as well as low-volume high concentrate waste streams. The following waste streams have been tested in the trial: leachate, industrial wash waters and fire wash waters.

EGL’s Chief Executive Officer, Mr Jason Dixon said, *“by running various waste streams at different concentrations it has given us great confidence that the technology has the ability to separate PFAS for destruction across a wide range of liquid waste types covering the majority of the market for PFAS removal. The level of separation as detailed in the table below is an outstanding result for the company.”*

The results exceeded expectations with the technology separating and removing regulated PFAS to below detection limits in all high-volume low concentrate trials. Successful removal of PFAS from these waste streams will allow for non-compliant, non-dischargeable PFAS water to be treated to a level that will be compliant to trade waste discharge requirements. Due to the nature of EGL’s processing technology, which operates without any filtration media and generates no additional waste streams, operating and capital costs are expected to be low compared to other PFAS technologies.

EGL will use its own in-house design, drafting and engineering services to fabricate its first commercial plant, to ensure protection of its Intellectual Property and to progress into the commercial phase.

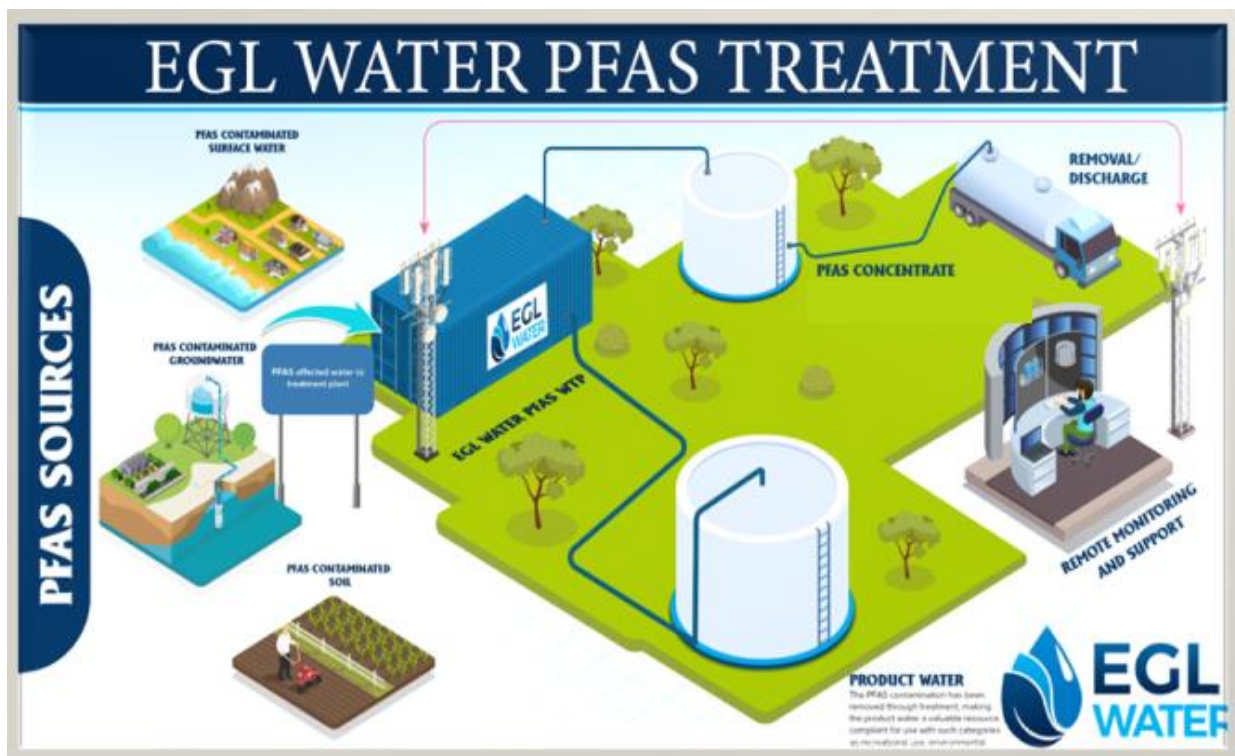
Table 1: Commercial water trial summary results

PFAS Content (ppb)	Regulated PFAS			Total PFAS*
	PFOA	PFHxS	PFOS	
Waste Sample In (#1)	0.30	0.13	0.16	0.80
Waste Sample Out (#1)	Below detection**	Below detection**	Below detection**	0.08
Waste Sample In (#2)	2.71	5.28	2.54	14.30
Waste Sample Out (#2)	Below detection**	Below detection**	Below detection**	0.12
Waste Sample In (#3)	3.24	5.92	2.94	16.10
Waste Sample Out (#3)	Below detection**	Below detection**	Below detection**	0.44
Waste Sample In (#4)	1.32	5.61	20.80	39.40
Waste Sample Out (#4)	Below detection**	Below detection**	0.06	6.72
Waste Sample In (#5)	1.31	6.68	19.90	41.50
Waste Sample Out (#5)	Below detection**	0.04	0.07	6.85

* Includes all regulated and unregulated PFAS compounds
 ** Detection limit is 0.02 parts per billion (ppb)

EGL’s Chairman, Ms Lynn Richardson said, *“this is a very exciting time for the company to have its technology reach the commercialisation phase and we thank our dedicated staff, the team at Victoria University, Institute for Sustainable Industries & Liveable Cities and Reclaim Waste for their help and support of this trial.”*

EGL Water’s PFAS separation and concentration technology has now been demonstrated as a viable solution for treating PFAS contaminated ground water, surface water, leachate, and wastewater. Research and development will continue into the treatment of PFAS contaminated soils with trials currently underway with Victoria University providing encouraging results. The technology’s versatility positions it in the market as a universal tool for the environmental remediation of PFAS contaminated sites.



EGL’S PFAS OPPORTUNITY

Per- and poly-fluoroalkyl substances (**PFAS**) are a group of man-made chemicals that includes PFOA, PFOS, GenX, and many other chemicals. PFAS have been manufactured and used in a variety of industries around the globe, including in the United States since the 1940s. PFOA and PFOS have been the most extensively produced and studied of these chemicals. Both chemicals are very persistent in the environment and in the human body meaning they don’t break down and can accumulate over time. There is evidence that exposure to PFAS can lead to adverse human health effects².

² <https://www.epa.gov/pfas/basic-information-pfas>

Historically PFAS has been widely used in food packaging, commercial household products including stain and water-repellent fabrics, non-stick products (e.g. Teflon), polishes, waxes, paints, cleaning products and fire-fighting foams (a major source of groundwater contamination at airports and military bases where fire-fighting training occurs). PFAS has also been used by industries such as chrome plating, electronics manufacturing and oil recovery, hence the prevalence in the environment.

The PFAS treatment market is a rapidly growing area driven by increasing environmental regulation as evidence emerges of the extent and toxic nature of PFAS substances in the environment and on human health. EGL believes that these regulations are driving a market need to remediate legacy sites ahead of redevelopment, as well as for the rehabilitation of active sites and those that impact human use such as agricultural applications, water ways, residential developments, nature reserves and recreational areas.

The separation of PFAS from both water and soil is a key step in removing the substance from contaminated areas and preventing further risks to health and the environment.

PLACEMENT

The Company is pleased to announce it has received firm commitments to raise \$4.75m (before costs) through a placement (**Placement**) of ~27.1 million shares at an issue price of \$0.175 per share. The Placement was strongly supported by existing and new institutional, sophisticated and professional investors. The funding will support the commercialisation of EGL Water's PFAS technology, provide additional working capital and support EGL's other business development opportunities.

Taylor Collison has been engaged by the Company to act as Lead Manager to the Placement. The Placement shares will be issued pursuant to the Company's existing annual placement capacity under Listing Rule 7.1 and are expected to be issued and commence trading on or about 16 December 2021.

The Placement issue price of \$0.175 per share represents:

- Nil premium / discount to the last traded price on 6 December 2021 (\$0.175)
- 4.7% discount to the 10-day VWAP (\$0.1837)
- 5.1% discount to the 30-day VWAP (\$0.1844)

This announcement has been authorised for release by the Board.

For further information, please contact:

Stephen Strubel

Joint Company Secretary

The Environmental Group Limited

About EGL

EGL has five business units, all committed to the protection of the environment by improving air quality, reducing carbon emissions, enhancing waste treatment, and lifting water quality.

- **Total Air Pollution Control** has a range of technologies which reduce dust, odours and harmful gasses from the environment.
- **Baltec IES** produces inlet and exhaust systems for gas turbines, which are used to complement and augment solar and wind energy production.
- **Tomlinson Energy Service** offers a network of service offices across Australia providing 24/7 service, maintenance and repairs of both proprietary equipment and other OEM equipment. The division also provides an essential link in our strategy to build a bio/waste to energy platform.
- **EGL Water** division continues to develop our technologies in conjunction with Victoria University. EGL recognises that one of the world's most valuable assets is water and will persist in our vision to reduce water pollution, leading to an improved environment, through low-cost technology solutions.
- **EGL Waste Services** provides the sales and services platform for the exclusive Turmec Agency agreement in Australia. Turmec are specialists in recycling solutions for the global waste industry, providing bespoke systems that enable their customers to efficiently recover high-quality material from waste, reducing the need for landfills.