

20 July 2022

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

## **EGL Water PFAS progress update**

**The Environmental Group Limited (ASX:EGL) is pleased to announce the Australian national Patent application acceptance for its PFAS soil and water remediation and the commencement of fabrication of the first PFAS separation unit for sale.**

### **Key highlights:**

The Australian national patent application from EGL's international PCT patent application for its soil and water PFAS remediation process has been recently accepted for grant with patent pending rights across more than 150 countries.

Following the successful commercial PFAS separation trials in November 2021, EGL committed resources from its in-house design, drafting and engineering services to fabricate its first commercially available plant, to ensure protection of its Intellectual Property and to progress into the commercial phase.

- All process design has been completed.
- Engineering 3D modelling and 2D drafting of the plant has been completed.
- Ignite Services, a wholly owned subsidiary of EGL, has commenced the fabrication process of the first plant.
- The plant is expected to be completed by mid-September this year.

### **Progress update.**

Following the successful separation and removal of regulated PFAS from various waste streams, EGL committed use of its own in-house design, drafting and engineering services to fabricate its first commercial plant for sale, to ensure protection of its Intellectual Property and to progress into the commercial phase.

The process design was refined by EGL Water optimising the plant design post the final trial results. The design improvement process has maximised efficiency while minimising operating and capital costs. Following completion of this process the EGL engineering team has finalised the drafting and modelling requirements for fabrication of the first plant.

Ignite Services have commenced fabrication of the plant at their Adelaide facility. The plant will be fully automated through the Programmable Logic Controller (PLC) which will both operate and monitor the plant whilst in use. Subject to supply chain restrictions, fabrication is likely to be completed within two months.

### **PFAS separation trial summary**

- 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. At the highest concentrate trial, regulated PFAS was removed to over 99.4%.
- The EPA granted approval for EGL's PFAS soil extraction technology to be trialled at a commercial level.
- EGL's technology has considerable advantages against other PFAS removal technologies including being simpler, safer, more versatile and more cost effective.

EGL's Chief Executive Officer Mr Jason Dixon said, "We are very pleased to have been able to develop a low-cost solution for our clients that will enable a great environmental outcome, and we look forward to supplying our first plant".

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 using the same technology platform with Victoria University, providing encouraging results.

## 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 effects<sup>1</sup>.

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.

This announcement has been authorised by the Board.

For further information, please contact:

Andrew Bush

[Andrew.bush@egl.com.au](mailto:Andrew.bush@egl.com.au)

Company Secretary & Chief Financial Officer.

The Environmental Group Limited

---

<sup>1</sup> <https://www.epa.gov/pfas/basic-information-pfas>

## 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 patented 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.