PFAS Risk Won't End Until We Contain the Residuals, Warns Pact Renewables

Company urges shift in PFAS conversation from drinking water to end-to-end containment solutions

SYDNEY, NSW, AUSTRALIA, August 19, 2025 /EINPresswire.com/ -- Pact Renewables Pty Ltd has called for an urgent shift in the global conversation on per- and polyfluoroalkyl substances (PFAS), highlighting that the current focus on removing PFAS from drinking water is incomplete and potentially misleading without addressing what happens to the concentrated residuals generated by treatment processes.

"Every primary or secondary PFAS treatment method — whether applied to drinking water, wastewater, or surface water — produces one or more concentrated residual waste streams," said Dr Aharon Arakel, Founder and Director of Pact Renewables. "Without safe, permanent containment of these residuals until destruction technologies are proven at scale and widely available, the problem is simply being shifted, not solved."

Pact Renewables recently made a formal submission to the Australian Senate Select Committee on PFAS, warning that PFAS residuals risk becoming the next legacy waste problem unless robust containment strategies are deployed immediately. In the submission, Dr Aharon Arakel described PFAS residuals as the 'third wave' of PFAS risk — no longer in the environment, not yet destroyed, but not safely contained. "We advocate the use of our Mineral Based Composite (MBC)–cement encapsulation technology as a potentially practical, cost-effective, and environmentally sound solution for safe, long-term landfill placement of PFAS residuals — particularly those in saline or mixed waste forms that challenge conventional methods.", he said.

"Our MBC–cement process physically and chemically stabilises a variety of hazardous waste streams, including fly ash from energy-from-waste incineration and coal power storage dams, asbestos dust, contaminated workplace safety wear, and concentrated effluents from water treatment processes, preventing leaching and environmental release while enabling engineered landfill disposal that meets strict regulatory criteria," Dr Arakel said. "It is potentially a critical bridging measure, as current global statistics on PFAS destruction technologies reveal that only a very small fraction of the total PFAS-contaminated water and waste streams are being fully destroyed at commercial scale. The result is a rapidly growing stockpile of PFAS-laden residuals. With new PFAS contamination sources being identified all the time, the gap between destruction capacity and the volume of captured PFAS residuals is widening, making the residuals problem

both massive and accelerating.”, Dr Arakel continued.

The company further argues that without a PFAS residual containment pathway, life cycle assessments and risk evaluations of PFAS treatment technologies are incomplete and potentially misleading.

Dr Arakel concluded, “We are ready to collaborate with regulators, industry, PFAS researchers and technology solution providers, and impact VC investors to develop real-world solutions for the PFAS residuals crisis and I welcome enquiries on our solutions."

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