

27 February 2020
IMMEDIATE RELEASE

BUBBLE TECH BLOWS MICROPLASTIC PROBLEM OUT OF THE WATER

An innovative Australian technology that uses bubbles to remove contaminants from water offers a solution to an emerging global pollution crisis – microplastics.

The technology belongs to EVO CRA, an Australian water treatment company that was formed in Tasmania in 2011.

The patented process, known as Ozofractionative Catalysed Reagent Addition or OCRA, literally floats the microplastic out of the water where it is collected and sent for recycling.

EVO CRA's Managing Director Mark Sykes says OCRA is a solution for many water-based environmental challenges.

"Microplastics are plastic items smaller than 5mm that are found in everyday products such as sunscreen, shampoo and detergent. Too small to be filtered out in the treatment plants, they wash into waterways where they harm our aquatic wildlife," he said.

"OCRA offers a positive solution to this complex environmental issue. The technology can be applied as a pre-treatment, that is, before the plastic enters the sewerage system or at the treatment plant to remove the particles before discharge."

World leader in microplastics research Dr Thava Palanisami is working with Evocra and is supportive of their work in this area.

"Evocra was an early entrant into finding a solution for microplastics which is a potential planetary boundary threat. OCRA has demonstrated it has a part to play in the solution of remediating the 12.7m metric tonnes of plastic litter than enter the ocean each year", he said.

Plastics can enter the human food chain and when ingested by marine life, can potentially cause death from starvation.

Mr Sykes said the applications for OCRA were vast with capability to treat minerals and contaminants in mining, oil and gas extraction, agriculture and aquaculture, high intensity industrial manufacturing, municipal water and wastewater treatment, and contaminated land remediation.

Just days ago, the world's largest environmental consulting firm Arcadis signed an exclusive licensing agreement to use OCRA to treat toxic PFAS (per-and poly-fluorinated alkyl substances), a component of products such as aqueous fire-fighting foams (AFFS), household chemicals, carpets and some clothes.

In the OCRA process, chemicals or metals attach to tiny, charged micro-bubbles, each the size of a width of hair, and balloon out of the water. In a world first, the technology was successfully used to help remediate a PFAS impacted industrial sewer resulting from a fire-fighting foam spill at the Brisbane Airport in 2017, removing greater than 99.9% of contaminants.

Mr Sykes said OCRA was addressing old, new and future water contamination issues.

“Our first commercial application was in acid mining drainage which has been an ongoing problem for the mining sector. PFAS is an international challenge we are facing right now and microplastics are certainly an emerging issue. Evocra are passionate about delivering technologies that have high social impact and that offer solutions across the spectrum in Australia and globally.”

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About EVOGRA

EVOGRA is an Australian company with premises in Tasmania, Brisbane, Newcastle and Sydney. We have a world-first solution for removing contaminants and metals from water, the cutting-edge Ozofractionative Catalysed Reagent Addition (OCRA) process. The first commercial scale plant was installed in 2011 to eliminate the effects of a mining related industrial effluent being released into a highly sensitive environmental region of Tasmania. OCRA has now evolved into a process applicable for treating a wide range of minerals and contaminants across numerous sectors including mineral processing and refining; oil and gas extraction; agriculture and aquaculture; high intensity industrial manufacturing, municipal water and wastewater treatment; and contaminated land remediation.