

US Field Study Demonstrates Long Term Stability of PFAS Immobilisation

An independent field study at a US site has demonstrated that the RemBind® technology immobilises PFAS contaminants without release after more than 16 months of monitoring, potentially paving the way for the safe onsite reuse of PFAS contaminated soils.

The performance of RemBind® was independently evaluated in the field at a US site by a global environmental firm. The powdered adsorbent was mixed directly into PFAS contaminated soil at a dosage rate of 5% to a depth of around 4.5 metres using rotary mixers. Portland cement was added simultaneously at a dosage rate of 10% to improve the geotechnical stability of the soil – important when considering future use of the treated site.

The treated soil was monitored over 16 months using US EPA Method 1315 to measure PFAS leaching from the soil. No PFAS leaching was detected after more than 16 months of monitoring. A further 2 years of monitoring is planned at site.

In-Situ Stabilisation/Solidification (ISS) is a widely adopted technique in the US for the remediation of heavy metals, but this is one of the first field-scale demonstrations of the technique for the treatment of PFAS contaminants.

“This study paves the way for the *in-situ* treatment of PFAS source zones, avoiding unsustainable dig and dump approaches and giving future generations the peace of mind that the PFAS binding is stable long term” said Dr Richard Stewart, Managing Director of RemBind Pty Ltd.

These real-world results support previous independent laboratory studies that simulated 100’s of years of stability under a range of environmental conditions using US EPA Methods 1313 and 1314.

PFAS refers to a mixture of synthetic chemicals used in some fire-fighting foams that are found in the soil across 100’s of airport sites worldwide. They are potentially toxic to human health and are dubbed ‘Forever Chemicals’ due to their persistence in the environment.

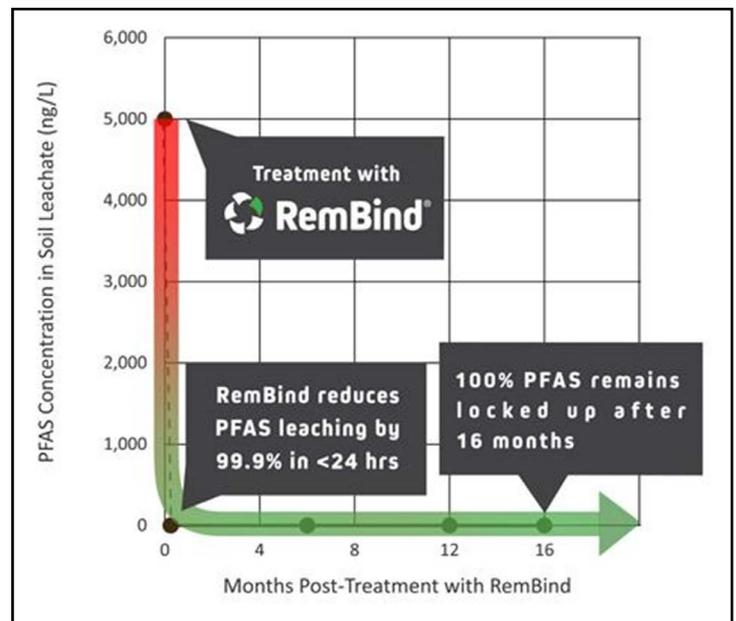
RemBind® is a powdered adsorbent that chemically immobilises (or ‘locks up’) PFAS contaminants in soil to prevent them leaching into groundwater where they can cause harm to the environment and can reach drinking water sources. RemBind® is considered world’s best practice for the immobilisation of PFAS in soil and has been applied commercially at field-scale in Europe, USA and Australia.

AquaBlok Ltd is the exclusive distributor for RemBind® products in North America.



Adding RemBind and Portland cement to immobilise PFAS contaminants at a US field site

Reduction in PFAS Leachability over 16 Months



“... giving future generations the peace of mind that the PFAS binding is stable long term”

Dr Richard Stewart
RemBind Pty Ltd