



evocra

WATER SOLUTIONS:EVOLVED

CASE STUDY

PROJECT	Landfill Leachate PFAS Removal
PRODUCT	Ozofractionative Catalysed Reagent Addition (OCRA®) + Polish
INDUSTRY	Solid Waste Management
LOCATION	Queensland, Australia

PROBLEM

The Client was seeking a solution to remove PFAS (Poly- and Per-fluoroalkyl Substances) from leachate at their solid waste resource recovery centre to ensure discharge compliance and approached **Evocra** for a solution, due to the proven success of **Evocra**'s patented Ozofractionative Catalysed Reagent Addition (OCRA®) technology in removing PFAS from other complex wastewaters.

SOLUTION

Evocra mobilized its PFAS 1125 containerised OCRA® system to the Client's site to conduct field trials, investigating removal of PFAS and co-contaminants from landfill leachate across a range of treatment times and performance conditions.

RESULTS & BENEFITS

A series of 14 trials were conducted to establish the optimal treatment parameters to meet the Client's expectations. The optimised OCRA® system followed by a small combined GAC/IX polishing stage achieved the following highlights:

- OCRA® system alone reduced PFOS by 99.98% (to <0.0001µg/L), PFOA by 99.69% (to 0.004µg/L), and PFHxS by 98.85% (to 0.023µg/L)
- OCRA® + polish reduced Sum of PFAS (TOPA) by 99.20%, to <0.1µg/L
- Following successful completion of the trials, the OCRA® system remained on site as an interim water treatment solution, with over 1.4 million litres of PFAS-impacted leachate treated to a level sufficient for offsite disposal. Waste generation from the OCRA® system was approximately 18,000 litres, or 1.25% of the inlet volume.



*PFAS 1125
WTP onsite*

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