

Re:Think Water

Depending on site-specific water quality, Cornelsen combines PerfluorAd® with complementary treatment technologies, enabling the treatment of PFAS and other contaminants within a single integrated process.

cornelsen
Umwelttechnologie GmbH

Graf-Beust-Allee 33
45141 Essen
Germany
www.cornelsen.group

cornelsen
Ltd.

Unit 26 Southfield Road Trading Estate
Nailsea, BS48 1JJ, Bristol
United Kingdom
www.cornelsen.group



cornelsen
Re:Think Water

PerfluorAd® for the Treatment of PFAS in Landfill Leachate

PerfluorAd® **PerfluorAd+®**

PerfluorAd® for the treatment of PFAS-contaminated landfill leachate



The Challenge

Landfill leachate is typically characterized by high concentrations of organic compounds.

High salt loads and contamination with heavy metals are also frequently detected.

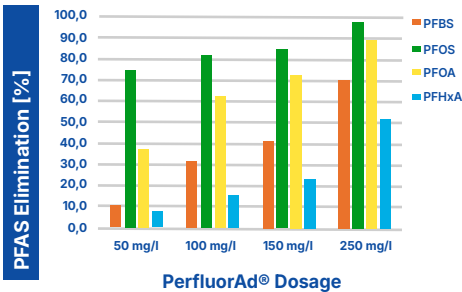
Turbidity, discoloration, and suspended particles are also commonly present.

Treatment by activated carbon results in very high cost

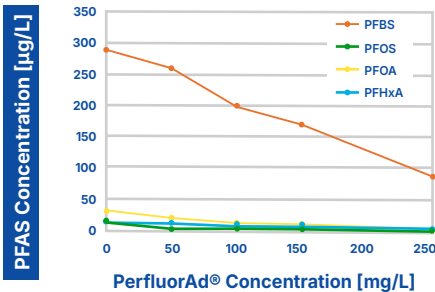
The Solution

- ➔ PerfluorAd® removes ≥80% of PFAS from landfill leachate.
- ➔ Particles are removed simultaneously.
- ➔ Short-chain PFAS can be treated particularly effectively with PerfluorAd+®.
- ➔ PFBS, a short-chain PFAS compound frequently found in landfill leachate, is also removed.
- ➔ Organic and inorganic co-contaminants have only a minor impact on treatment performance with PerfluorAd®.

PFAS Removal Rates from Landfill Leachate



Reduction in PFAS Concentration through PerfluorAd® Addition



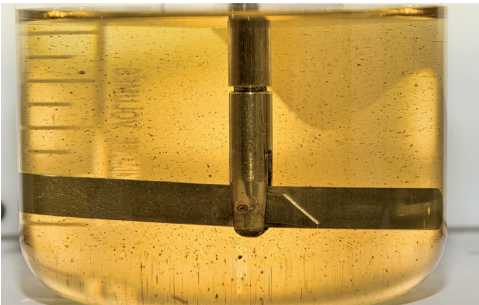
The PerfluorAd® Process

Practical Application

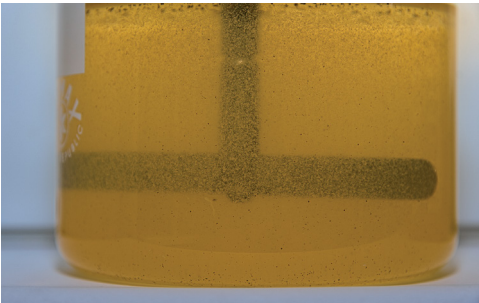
- ➔ Analysis of Leachate Streams
- ➔ Laboratory Testing
- ➔ Identification of the Treatment Process
- ➔ PFAS Analysis to Determine Removal Rates



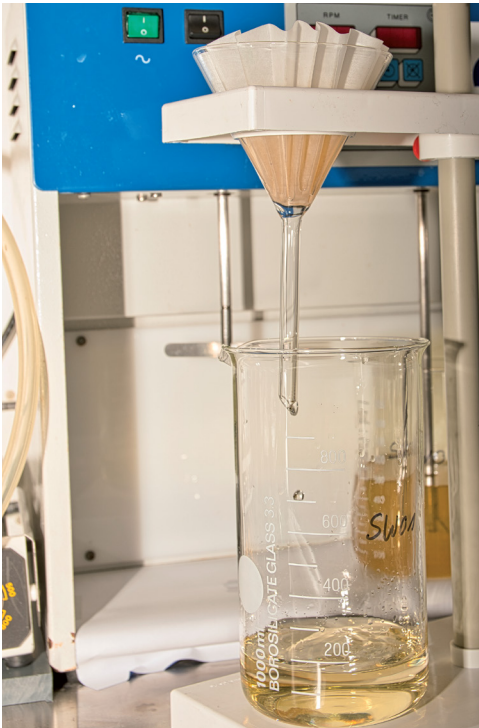
The laboratory test



Raw Water



PFAS Precipitation with PerfluorAd®



Separation Step by Filtration

The Treatment Process in Practice with the PerfluorAd® System

