

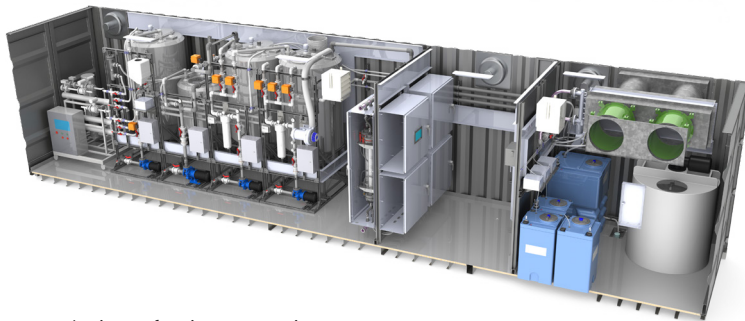
# Axine’s electraCLEAR™ PFAS Destruction in Landfill Leachate

## Challenges in Managing PFAS in Landfills

Managing PFAS (per- and polyfluoroalkyl substances) in landfill leachate poses significant challenges due to their persistence and mobility. These difficult to treat chemicals, resistant to degradation, demand robust remediation solutions for regulatory compliance and public health protection. Axine Water Technologies provides a proactive solution to address these challenges while aligning with environmental and sustainability objectives. Axine’s electraCLEAR™ electrochemical oxidation technology offers a simple, cost-effective solution. Partnering with Axine allows waste management facilities to prioritize core operations, unburdened by PFAS leachate concerns, with guaranteed results.

## A Timely Solution

Axine’s electraCLEAR electrochemical oxidation process utilizes multiple types of electrode materials to produce powerful direct and indirect oxidizing conditions. Our highly advanced controls optimize treatment in real time to completely destroy PFAS molecules back to their harmless elemental building blocks. Customers are guaranteed to meet the most stringent regulations with no waste residuals.



Rendering of Axine’s on-site system

## Proven PFAS Destruction

electraCLEAR is the first commercial-scale electrochemical oxidation system with proven 3+ log (>99.9%) destruction of both long and short-chain PFAS compounds. Performance results from various sources and concentrations demonstrate the system’s ability to deliver reliable performance even under challenging conditions. Table 1 provides data on our PFAS destruction performance, validating electraCLEAR’s efficacy across diverse sources and concentrations.

Analyte	Carbon #	Avg. Initial Conc. (ng/L)
Total PFAS ng/L	--	66,682,571
PFAS Compound	Carbon #	Avg. Removal
NETFOSAA	C12	99.99%
PFDoA	C12	99.90%
NMeFOSAA	C11	99.99%
PFUnA	C11	99.72%
8:2 FTS	C10	94.96%
PFDA	C10	99.99%
PFNA	C9	99.81%
PFOS	C8	99.51%
PFOA	C8	99.97%
6:2 FTS	C8	99.79%
PFOSA	C8	99.37%
PFHpA	C7	99.97%
PFHpS	C7	99.99%
4:2 FTS	C6	99.29%
PFHxA	C6	99.95%
PFHxS	C6	99.98%
PFPeA	C5	99.74%
PFPeS	C5	100.00%
PFBS	C4	95.43%
PFBA	C4	99.63%
2,3,3,3-TFPA	C3	97.06%
PFPrA	C3	99.84%
TFA	C2	96.33%

Table 1 – Wastewater compounds and treatment results

## Advantages of electraCLEAR:

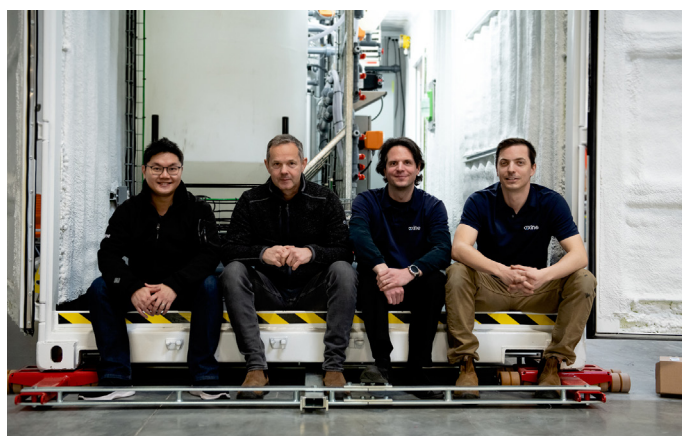
- **Complete PFAS Destruction:** Achieve >99.9% mineralization of PFAS molecules and other contaminants.
- **Powerful Technology:** Utilizes multiple electrode materials with advanced AI and Machine Learning for continuous real-time optimization.
- **Simple Integration:** Modular design facilitates easy integration in containerized or standalone configurations.
- **Process Safety:** Operates at ambient temperature and pressure, eliminating safety concerns associated with high thermal oxidation processes.
- **Guaranteed Performance:** Proven through over 130,000 hours of continuous full-scale operation, backed by Axine's Treatment-as-a-Service approach.



Axine's on-site system installation

## Proven Technology with Guaranteed Results

With over 7 years of experience in destroying contaminants in industrial wastewater, Axine's electraCLEAR provides a safe, 24/7 on-site solution. With Treatment-as-a-Service, Axine guarantees compliance with current and future regulations, allowing our customers to focus on their core operations while we address their PFAS leachate concerns.



Axine's expert team

Partner with Axine to safeguard your operations against PFAS regulatory challenges and ensure a sustainable, compliant, and efficient future for waste management.

## About Axine Water Technologies

Axine Water Technologies offers advanced on-site industrial wastewater treatment using electrochemical oxidation. With over a decade of experience and 130,000+ commercial hours, Axine helps operations meet discharge permits, cut disposal costs, and mitigate litigation risks by destroying PFAS, solvents, and other contaminants.

Learn more at [www.axinewater.com](http://www.axinewater.com) and connect with us on LinkedIn at [www.linkedin.com/company/axine-water-technologies/](https://www.linkedin.com/company/axine-water-technologies/).

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