

Destroying Forever Chemicals with PFAS Annihilator™

PFAS disposal has previously been limited to incineration, landfilling, and collection in stockpiles. These solutions only relocate the PFAS contamination and allow harmful byproducts to persist. As EPA advisory limits tighten, there is a growing need for an effective means of PFAS destruction.

Don't Move PFAS. Annihilate it!

The PFAS Annihilator[™] is a ready-now, on-site destruction solution powered by supercritical water oxidation (SCWO). The patented technology breaks the nearly indestructible carbon-fluorine bond, destroying PFAS chemicals to non-detectable levels. It is a scalable solution and can serve as a stand-alone solution or in combination with other systems to break down PFAS in landfill leachate, aqueous film-forming foams (AFFF), drinking water, and wastewater.



AFFF

Safely and completely destroys AFFF. PFAS Annihilator destroys PFAS in firefighting foam without creating harmful byproducts associated with other treatment methods.



Landfill Leachate

A proven on-site solution, PFAS Annihilator destroys over 99.99% of PFAS in contaminated landfill leachate without creating secondary waste.



Wastewater

Destroy PFAS to non-detect levels in contaminated wastewater. PFAS Annihilator works on-site and only produces inert salts, eliminating the need for incineration or storage of byproducts.

PFAS Annihilator Differentiators:

>99.99% Destruction: Short- and Long-chain compounds

Minimal Waste: Only byproducts are water, inert salts, CO₂

Highly Efficient: <10 sec residence time; heat exchangers

Complementary: Works with separation and concentration

Permit Ready: Below Michigan thresholds; underway for other states

Commercial Ready: March 2023 deployment for leachate; Taking orders for more units in 2023



A Proven Solution

In customer engagements, PFAS Annihilator technology has successfully destroyed 99.99% of PFAS in landfill leachate and AFFF, with concentrations in the millions of parts per trillion.



Landfill Leachate Deployment Highlights

- Destroyed concentrated and unconcentrated landfill leachate on site
- >99.9% reduction of PFAS for all tested runs
- No PFAS detected in reactor effluent
- No PFAS detected in the waste stream vapor
- All volatile organic compounds (VOC) and semi-volatile compounds (SVOCs) destroyed to non-detect levels in aqueous effluent



AFFF Deployment Highlights

- Destroyed four formulations of AFFF concentrate (Buckeye AR, National Foam, PHOS-CHEK[®], THUNDERSTORM[®]) using a mobile unit
- Beginning concentrations ranged from 3% to 16% AFFF
- >99.99% removal of PFAS
- No PFOA, PFOS, PFBS, or GenX detected in the final effluent
- 100% destruction of VOCs (SVOCs were not detected in the influent or effluent)

Revive Environmental is bringing this technology to scale to treat industrial volumes.

Contact one of our experts to learn more. www.revive-environmental.com



*Based on analytical data received through 22 September 2022

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