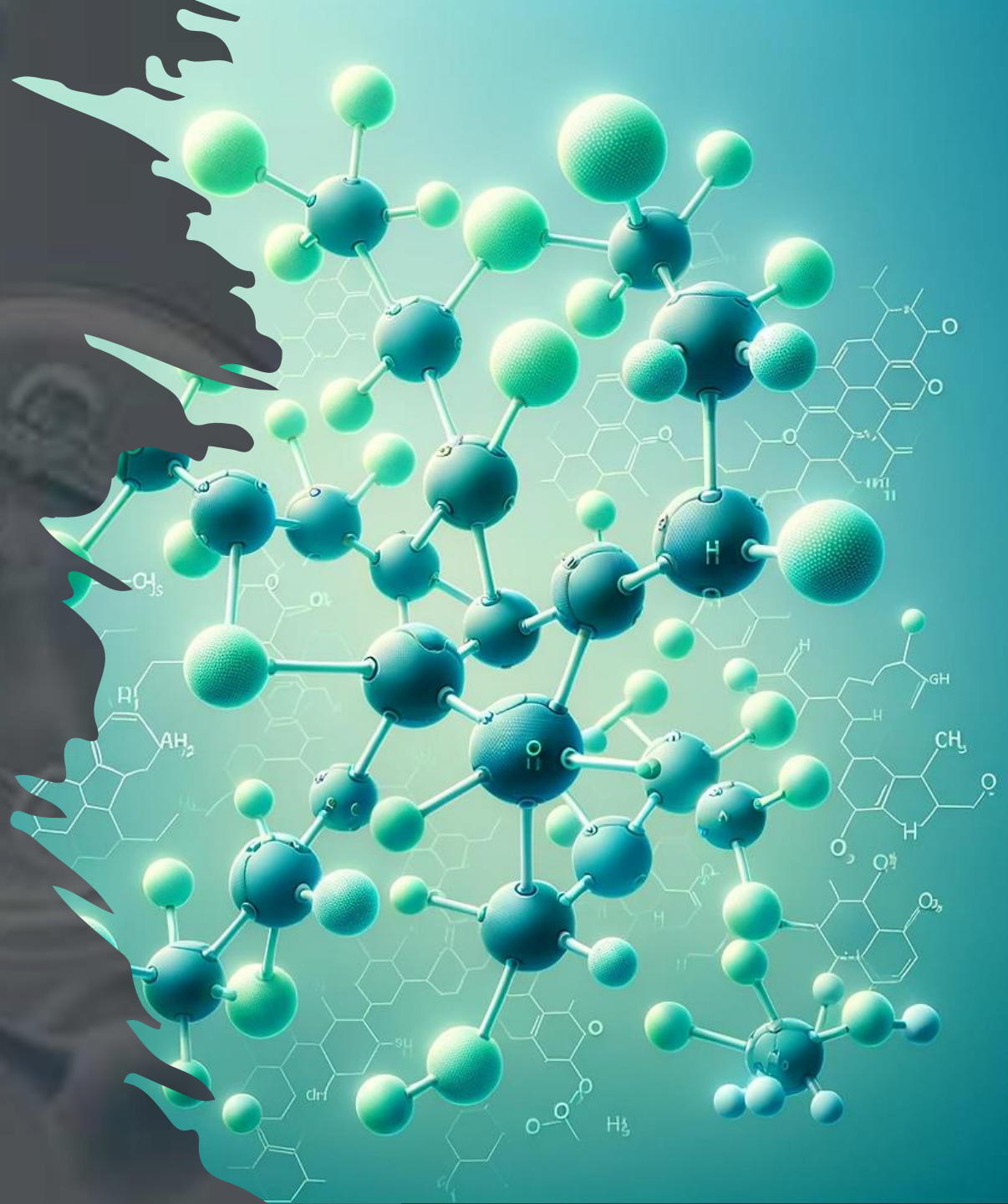
# A Novel and Low-Waste Solution for Capturing and Destroying PFAS in Leachate



# A novel approach to PFAS capture

## *AQUEOUS ELECTROSTATIC CONCENTRATION*

- Started in answer to a 2017 EPA Call for innovation
- Engineers saw a need for better PFAS capture tech
- "Back of the napkin" invention

News | January 28, 2020

**BioLargo Engineering Is Tackling PFAS Head-On With New Treatment Technology – Moving To Next Phase Of Groundbreaking PFAS Work**

Oak Ridge, TN – BioLargo Engineering, Science & Technologies (BLEST), today announced that it has validated the efficacy of a new, cutting-edge water treatment technology aimed at solving the growing international per- and polyfluoroalkyl substances (PFAS) contamination crisis. Having completed its work under a Phase I SBIR grant from the EPA to its parent corporation BioLargo, Inc. (OTCQB:BLGO), it is moving to the next phase of development in preparation for demonstration pilots and

- Initial design was funded by an SBIR Grant
- Idea was:
  - Create a PFAS capture technology that is more specific for PFAS than GAC or IX
  - Aim to be more energy efficient, smaller footprint

AEC
AQUEOUS ELECTROSTATIC CONCENTRATOR

# Aqueous Electrostatic Concentration


# Combined with Efficient Destruction

# The Collection/Destruction Process

PFAS Removal and Concentration

- Treatment train that utilizes the AEC is used for the removal and concentration of PFAS from the leachate

PFAS Stripped from the **AEC Membrane**

- **Patented method** for stripping PFAS from membranes active surface

PFAS Destroyed with **Patented** EO system

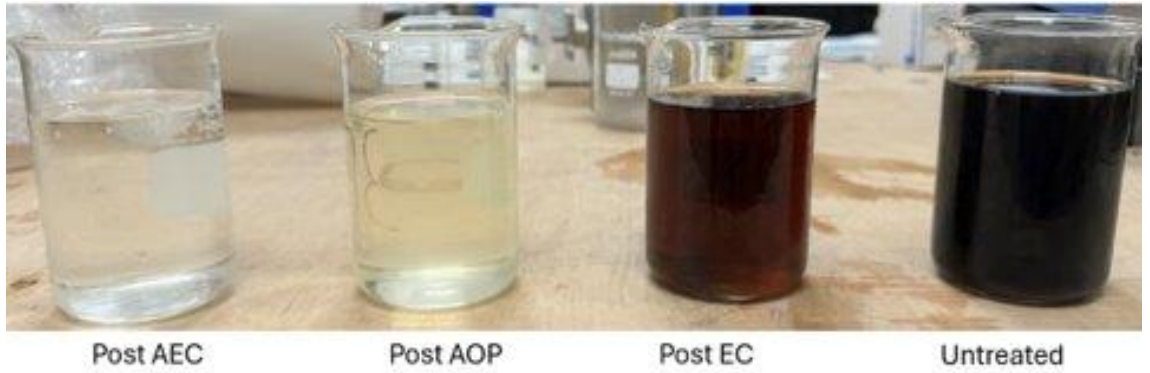
- PFAS destroyed using **patented** electro-oxidation system.

# Leachate Treatment Results

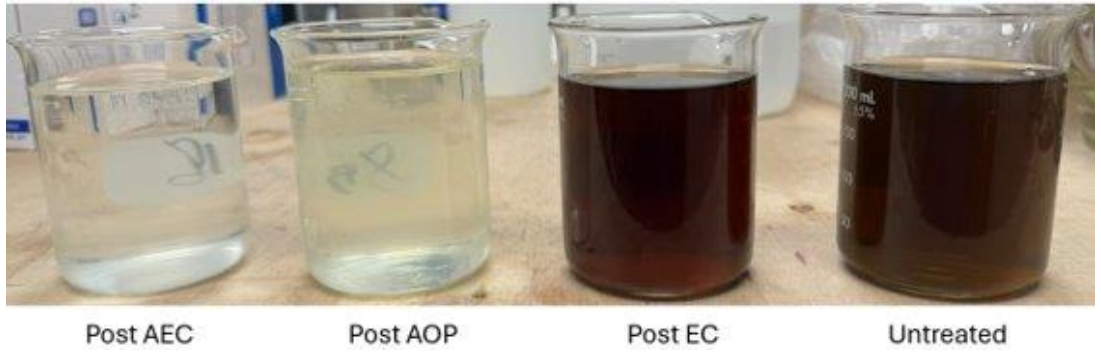
AEC
AQUEOUS ELECTROSTATIC CONCENTRATOR

## Appearance Comparison - Post UF Leachate


## Appearance Comparison – Post Foam Fraction




## Appearance Comparison – Raw Leachate




| Leachate Source | Starting PFAS amount (ppt) | Removal % by AEC train |
|---|---|---|
| UFP | 59,438 | 98 |
| Raw | 147,226 | 99.8 |
| PFF | 475,847 | 99.6 |

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**OTCQX: BLGO**

Contact us for a free consultation on PFAS and to learn more about our PFAS solutions

Educational seminars on PFAS available – we deliver webinars and seminars eligible for CEUs

**Contact:**


**Tonya Chandler**
President
BioLargo Equipment Solutions & Technologies
(608) 397-8301
Tonya.chandler@biolargo.com

**Alex Evans**
Director of Communications/Scientist
BioLargo, Inc.
(780) 915-4447
Alex@biolargo.com