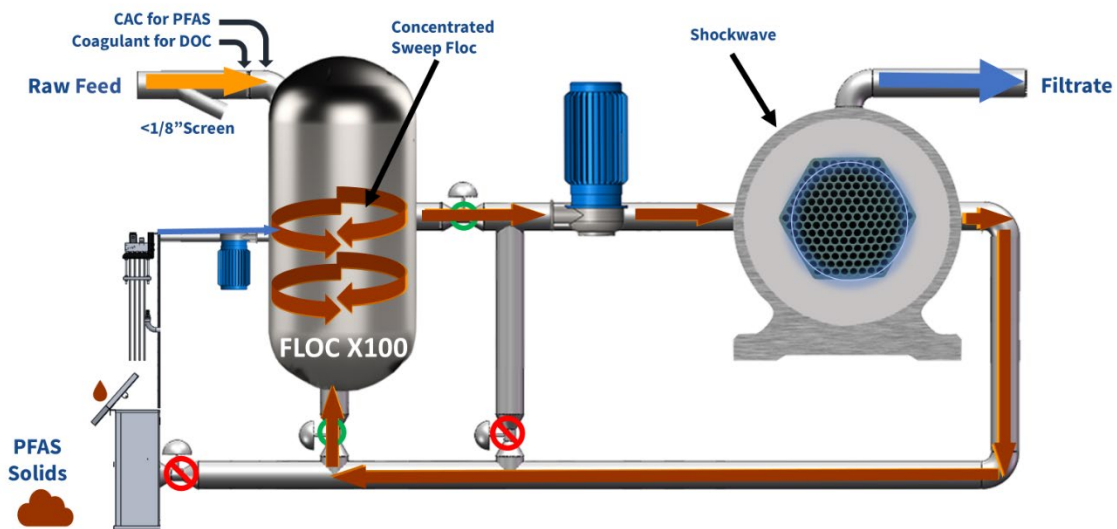## Better Water at Lower Cost

CAC (*Cuf* Activated Carbon) is a high efficiency process that removes PFAS contaminants from surface and/or groundwater. It is a *Cuf* capability that can be activated at any time, in addition to *Cuf*'s primary scope of removing Metals, Bacteria, DOC, THM & HAA Precursors and more.

Process

The *Cuf* process, has the ability, to inject, mix, hold and recover GAC, PAC or CAC creating a low-cost PFAS solution for water purification.
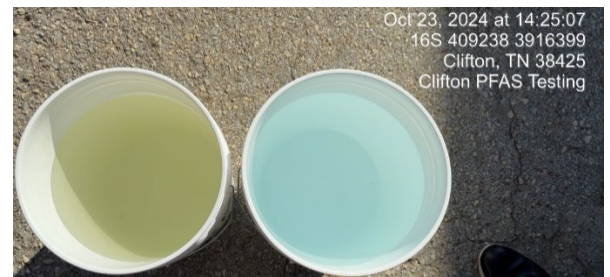

Solids Disposal

CAC solids are disposed of in the same way as GAC, PAC or IX.

Performance

Sustained PFAS removal using CAC has been demonstrated on the more challenging surface water with elevated levels of background TOC/DOC/NOM.

Source – Tennessee River | End Use – Drinking Water | Flux – 250 GFD		
Contaminant	Feed (ng/L)	Filtrate (ng/L)
DOC	Variable	Below MCL
PFOS	6.7	<2.0
PFOA	3.3	<2.0
PFHxA	2.1	<2.0
PFBS	2.6	<2.0
PFBA	4.0	<2.0

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Clifton, TN 38425
Clifton PFAS Testing

The CAC Difference

GAC, PAC & CAC are all forms of activated carbon with each having successively smaller particle size and corresponding increasing surface area by mass. Consequently, the surface area per mass goes up exponentially from GAC -> PAC -> CAC. This exponential increase in surface area accelerates reaction rate (adsorption on to the CAC).

Nominal Particle Size	
GAC	400-2500 um
PAC	10-100 um
CAC	0.01-1 um

Cuf **Activated Carbon** (CAC) process provides multiple benefits which include:

1. The high Reynolds number (turbulence) of the *Cuf* process provides robust and effective mixing at the ppt level independent of viscosity.
2. The *Cuf* process has a proven 30-year history of processing colloidal particles. It should be noted that other processes are challenged when processing colloidal particles.
3. The dwell time of the activated carbon is preciously controlled for optimal adsorption efficiency regardless of changing feed water composition, PFAS loading & variation or feed rate.
4. One system provides the overall solution.

CUF On-Site Pilot; Full Remote/ Automation/ LT2 Compliant/ ANSI/CAN 61-372