

CETCO to Launch Effective PFAS Remediation Product

At CETCO, we're working to improve the available technology for PFAS removal

Access to clean drinking water is a global concern, one that has gained increasing public scrutiny in the U.S. over the past several years. As recently as 2014, the city of Flint, Michigan failed to adequately treat its water and exposed residents to dangerous levels of lead. Attention has now turned to PFAS (per- and polyfluoroalkyl substances), which are rather ubiquitous man-made chemicals that have compromised drinking sources in hundreds of locations across the U.S. At CETCO, we have been focused on finding a cost-effective process for PFAS removal from drinking water. An enterprise-wide effort has led us to develop a highly compelling solution for this emerging contaminant. This article covers the basics of PFAS and what CETCO is doing to help.

First, What is PFAS?

Over the past 60 years, PFAS were (and continue to be) integrated into dozens of industrial and consumer products. PFAS have been used in common products, including non-stick cookware, clothing materials, carpets, firefighting foams and various other products designed to resist grease, water and oil. During the manufacture and use of products that contain PFAS, the chemicals have seeped into soil and water. Their strong carbon-fluorine chemical bonds prevent their breakdown in nature, eventually allowing the compounds to enter the water supply and food chain.

As a result, scientists have been studying the health impact of PFAS, concluding that exposure causes numerous health effects.

Mapping contamination

Quantifying one's risk is difficult, though the Environmental Working Group has published an [interactive map](#) that identifies known contaminated water sources around the country. The United States Environmental Protection Agency (EPA) recently established PFAS screening values of 40 parts per trillion (ppt) and has proposed a [Reasonable Progress Goal \(RPG\) of 70 ppt](#). Some states have set more rigorous Maximum Concentration Limits (MCLs) and many more are evaluating doing the same.

The Centers for Disease Control (CDC) recommends that "if your drinking water is contaminated above levels specified by the EPA or your state government, use an alternate water source for drinking, preparing food, cooking, brushing teeth, and any other activity when you might swallow water."

To-date, several products have been developed and used to filter PFAS, but they are limited by their high cost and short lifespan. Furthermore, their effectiveness can be affected by various factors, such as water chemistry, pH or the presence of co-contaminants. Since PFAS chemicals can assume various forms (you'll see acronyms, including PFOA, PFOS, PFHxS and PFNA,) the stated technology must be effective across the broad spectrum of PFAS. The search for a technology that is more predictable and robust has been a focus for CETCO for the past several years.

Which brings us to our very exciting, upcoming announcement:

On May 23, we will be launching an NSF-certified product that is capable of effectively removing and remediating PFAS in a cost-efficient manner. This new product addresses the entire spectrum of PFAS. Not only can it be used to treat both drinking water and ground water sources, it can also be used to treat the soil in source zones, preventing PFAS contamination from spreading.

Access to clean drinking water is a fundamental concern that impacts everyone, and we're committed to facilitating that universal need.

Stay tuned to learn more about our new PFAS remediation product.