

Column testing indicates FLUORO-SORB® adsorbent removes 3-4 times the amount of PFAS in contaminated groundwater than granular activated carbon

BETHLEHEM, Pa. (May 5, 2020) – In connection with the development of FLUORO-SORB® adsorbent, our proprietary, NSF-certified product that effectively treats a broad spectrum of PFAS, CETCO has engaged several universities and other entities to assist with independent testing and product performance validation. Results from a recent Colorado School of Mines column testing study validate the effectiveness of FLUORO-SORB® adsorbent in treating PFAS contaminated groundwater compared to traditional granular activated carbon (GAC). The key finding of the study shows that FLUORO-SORB® adsorbent allowed three-to-four times higher water flux through the column before exceeding the established [EPA health advisory level](#) of 70 parts per trillion PFAS in drinking water compared to GAC.

The study was designed to identify which PFAS molecules were best adsorbed onto the media as well as the influence of the chemistry and co-contaminants in the water. The study monitored the removal of the eight most prevalent PFAS compounds, including perfluorooctane sulfonate (PFOS), perfluorohexanesulfonate (PFHxS), perfluorobutanesulfonate (PFBS), perfluorononanoic acid (PFNA), perfluorooctanoic acid (PFOA), perfluoroheptanoic acid (PFHpA), perfluorohexanoic acid (PFHxA) and perfluoro-n-pentanoic acid (PFPeA). PFAS contaminated groundwater was obtained from a site in Michigan for the study.

FLUORO-SORB® 200 adsorbent was compared to a leading brand of granular activated carbon (GAC) for the column tests which were arranged to compare removal efficiency of the systems. On average, FLUORO-SORB® 200 processed 7,700 bed volumes of PFAS contaminated groundwater before the total contamination levels of the eight compounds reached 70 parts per trillion. In comparison, the GAC processed only 2,100 bed volumes of PFAS contaminated groundwater before the total contamination levels of the eight compounds reached 70 parts per trillion.

About FLUORO-SORB® adsorbent

FLUORO-SORB® adsorbent is a proprietary, NSF-certified product that effectively treats a broad spectrum of PFAS. It resists competitive adsorption from co-contaminants typically found in water and sediments. Due to its higher density and adsorption properties, FLUORO-SORB® adsorbent requires fewer change-outs than other treatment media, resulting in a reduced lifecycle total cost of treatment.

Additionally, the ability of FLUORO-SORB® adsorbent to serve as a pre- or post-treatment in connection with other treatment media not only maximizes the removal of PFAS, but also helps to improve efficiency and extend the life of these water treatment trains.

The versatility of FLUORO-SORB® adsorbent also extends to a variety of deployment strategies. It can be set up as a flow-through treatment media, utilizing existing pump and treat vessels for drinking and/or groundwater. It can also be used within a CETCO® [REACTIVE CORE MAT®](#) composite geotextile mat for sediment capping. Finally, it can be deployed for in-situ treatment – either for In-situ Stabilization and Solidification (ISS) or as a Permeable Reactive Barriers (PRB) – of the PFAS source for source zone treatment.

FLUORO-SORB® adsorbent is commercially available in three granule sizes in four custom blends. For more information or to obtain a sample for a laboratory treatability study, visit www.cetco.com or contact cetco@mineralstech.com.

About PFAS

PFAS have been integrated into dozens of industry and consumer products over the past 60 years, including non-stick cookware, clothing materials, carpets, firefighting foams and various other products designed to resist grease, water and oil. During the production and use of products that contain PFAS, the chemical becomes absorbed in the soil and water. The strong carbon-fluorine chemical bond prevents their breakdown in nature, eventually allowing it to enter the food chain.

About CETCO

A subsidiary of Minerals Technologies Inc., CETCO is a construction technologies company based in Bethlehem, Pennsylvania. Offering solutions for commercial, industrial and infrastructure construction challenges worldwide, CETCO provides expertise in transforming minerals and polymers into technologies that improve productivity and performance. This includes leading the industry in environmental solutions for containment and remediation of pollutants, including groundwater treatment, solidification and stabilization, and sediment remediation.

About Minerals Technologies Inc.

New York-based Minerals Technologies Inc. (MTI) is a resource- and technology-based growth company that develops, produces and markets worldwide a broad range of specialty mineral, mineral-based and synthetic mineral products and related systems and services. MTI serves the paper, foundry, steel, construction, environmental, energy, polymer and consumer products

industries. The company reported sales of \$1.8 billion in 2019. For more information visit www.mineralstech.com.

Product Link

<https://www.mineralstech.com/business-segments/performance-materials/cetco/environmental-products/products/fluoro-sorb>

FLUORO-SORB® YouTube Video

<https://www.youtube.com/watch?v=HGKawPAMULA>

Website

<http://www.cetco.com>

Social Media

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