Product Brochure

SourceStop®

Stop PFAS at the Source

Effective soil treatment using SourceStop



REGENESIS®

SourceStop®

Stop PFAS at the source

SourceStop® is a dry, low-dust activated carbon microaggregate designed to immobilize PFAS in impacted soil.

When mixed into source-zone soils, SourceStop disperses upon contact with moisture, distributing fine activated carbon particles throughout the soil matrix. This provides extensive soil coverage and rapidly reduces PFAS leachability and continued discharge to groundwater.

SourceStop combines the handling advantages of a low-dust material with the distribution and sorption performance of fine-particle activated carbon. Unlike conventional powdered sorbents, it can be applied without presaturation or a separate dust-suppression step. The fine carbon particles allow greater coverage to ensure effective treatment of PFAS-impacted soils.

SourceStop can be used independently for source-soil treatment or combined with PlumeStop® to provide an integrated remedy addressing both PFAS source soils and the downgradient groundwater plume.

Efficient Remediation of the Source-Plume System Eliminates Exposure Risk

It is estimated that 57,000 PFAS-contaminated sites exist in the US alone with tens of thousands more throughout the world*, each containing a source area where the contaminants were originally released into the environment. These source areas contain high concentrations of PFAS in the shallow soils which often migrate vertically into groundwater, contributing to the development of groundwater plumes.

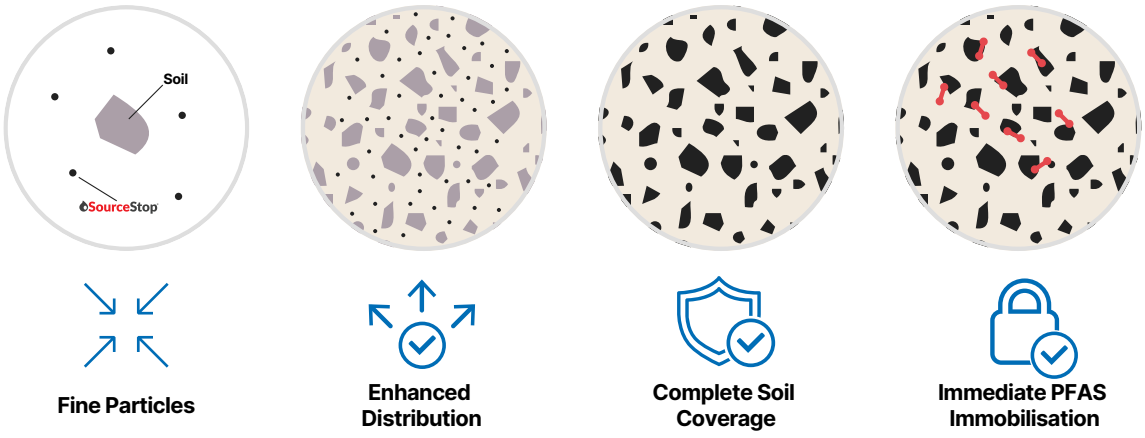
Due to PFAS' persistence, mobility, and parts-per-trillion cleanup levels, these soil source areas can lead to the development of large PFAS groundwater plumes and sustain them for many decades. This leads to impacts on public and private water systems, surface waters, and other receptors. Effectively remediating these source areas must address the entire vertical column where PFAS may be distributed, including the soil vadose zone, capillary fringe, and groundwater.

Mitigating PFAS Source Zones is Key to Minimizing PFAS Exposure Risk

PFAS has been used in manufacturing and firefighting efforts for decades, where high levels of PFAS in soil and groundwater reside as long-term sources of groundwater contamination. These source areas include aqueous film-forming foams (i.e., AFFF) fire training sites, PFAS bulk chemical spill locations, Class B Firefighting System testing pads, oil and gas development sites, and metal-fume-suppression stations, to name a few.

When left untreated, they can lead to extensive PFAS-contaminated groundwater plumes, posing unacceptable risks to human health and the environment.

PFAS' persistence and mobility allow them to travel far and wide in groundwater, resulting in plumes extending over long distances (i.e., miles/ kilometers) and persisting over long timeframes (i.e., decades) if left untreated. Effective source-zone management requires addressing the PFAS-impacted soils that continue releasing contaminants to groundwater.



Benefits

Rapid Reduction in PFAS Leachability
Fine activated carbon particles distribute through the soil matrix, rapidly sequestering PFAS and reducing continued contaminant loading to groundwater.

Enhanced Distribution and Coverage
SourceStop disperses when exposed to soil moisture, ensuring more uniform contact between activated carbon and PFAS-impacted soil.

Low Cost
Remedies can be implemented at a fraction of the cost of alternatives like soil excavation and removal, resulting in dramatic project cost savings.

Low-Dust, Easy Application
The dry microaggregate formulation reduces dust, nuisance conditions, and windborne product loss during handling and mixing. No presaturation or separate dust-suppression step is required.

No Hazardous Waste Streams Generated
Soil Stabilization occurs onsite, avoiding the generation of hazardous waste, which spreads liability through the waste management supply chain.

Integrated Source-and-Plume Management
SourceStop can be combined with PlumeStop groundwater treatment to reduce ongoing PFAS release from source soils while controlling downgradient plume migration.



Application Methods

- Excavation, mixing, and replacement
- Stockpile treatment
- Surface broadcasting followed by tilling or discing
- Shallow in situ soil mixing
- Deep soil mixing using hydraulic rotary equipment
- Treatment within trenches or excavated source areas
- Treatment of soil before permitted onsite reuse
- Source-soil treatment combined with a downgradient PlumeStop barrier

Source Areas and Site Types

- Airports and airfields
- Military installations
- Fire-training and AFFF release areas
- Fire-supression system testing areas
- Metal-plating and metal-finishing facilities
- Chemical manufacturing and storage facilities
- Refineries and bulk fuel terminals
- Landfills and waste-management facilities
- Sites containing PFAS-impacted construction spoils or excavated soil
- Wastewater treatment and biosolids-handling facilities

Flexible SourceStop Applications

SourceStop can be incorporated using conventional excavation, earthmoving, and soil-mixing equipment. The appropriate application method is selected based on treatment depth, soil conditions, site access, PFAS distribution, and the intended management of the treated soil.

Integrated Source and Plume Treatment for a Long-Term PFAS Risk Reduction Solution

SourceStop and PlumeStop perform complementary functions within an integrated PFAS remedy. SourceStop treats impacted source soils to reduce continued PFAS leaching, while PlumeStop treats groundwater to control migration through the dissolved plume. Together, the technologies can address both ongoing contaminant loading and downgradient exposure risk.

Integrating these technologies for remediating a source-plume system offers a low-cost, zero-waste, low-carbon footprint remediation solution for PFAS sites.

Control PFAS at the Source

SourceStop provides a practical means of treating PFAS-impacted soils in place or during excavation, rapidly reducing PFAS leachability while minimizing dust, mixing time and ensuring effective remediation.

When combined with PlumeStop groundwater treatment, SourceStop supports an integrated remedy extending from the original release area to the downgradient plume boundary—reducing contaminant loading, controlling migration, and protecting receptors.

Interested in an effective way to treat PFAS-impacted soil?

Contact REGENESIS for a site-specific application review, treatability testing, plus dosage and mixing recommendations.

© 2026 All rights reserved. PlumeStop, SourceStop and REGENESIS are registered trademarks of REGENESIS Bioremediation Products. All other trademarks are property of their respective owners.

REGENESIS®