



PFAS Remediation Technology: FLUORO-SORB[®] Adsorbent

September 26th, 2024

Forward Looking Statements and Non-GAAP Measures



This presentation may contain "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. Forward-looking statements provide current expectations and forecasts of future events such as new products, revenues and financial performance, and are not limited to describing historical or current facts. They can be identified by the use of words such as "believes," "expects," "plans," "intends," "anticipates," and other words and phrases of similar meaning. Forward-looking statements are necessarily based on assumptions, estimates and limited information available at the time they are made. A broad variety of risks and uncertainties, both known and unknown, as well as the inaccuracy of assumptions and estimates, can affect the realization of the expectations or forecasts in these statements. Actual future results may vary materially. Significant factors that could affect the expectations and forecasts include worldwide general economic, business, and industry conditions; the cyclical nature of our customers' businesses and their changing regional demands; our ability to compete in very competitive industries; consolidation in customer industries, principally paper, foundry and steel; our ability to renew or extend long term sales contracts for our satellite operations; our ability to generate cash to service our debt; our ability to comply with the covenants in the agreements governing our debt; our ability to effectively achieve and implement our growth initiatives or consummate the transactions described in the statements; our ability to successfully develop new products; our ability to defend our intellectual property; the increased risks of doing business abroad; the availability of raw materials and access to ore reserves at our mining operations, or increases in costs of raw materials, energy, or shipping; compliance with or changes to regulation in the areas of environmental, health and safety, and tax; risks and uncertainties related to the voluntary petitions for relief under Chapter 11 of the U.S. Bankruptcy Code filed by our subsidiaries BMI OldCo Inc. (f/k/a Barretts Minerals Inc.) and Barretts Ventures Texas LLC; claims for legal, environmental and tax matters or product stewardship issues; operating risks and capacity limitations affecting our production facilities; seasonality of some of our businesses; cybersecurity and other threats relating to our information technology systems; and other risk factors and cautionary statements in our 2023 Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and other reports filed with the Securities and Exchange Commission. The Company undertakes no obligation to publicly update any forward-looking statement, whether as a result of new information, future events, or otherwise.

MINERALS TECHNOLOGIES

A Global Specialty Minerals Company



\$2.2B
Net Sales

~4,000
Employees

32
Countries

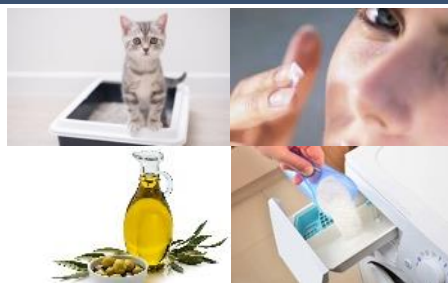
12
R&D Centers

CONSUMER & SPECIALTIES \$1.2B

Functional components in a variety of consumer and industrial goods



Household & Personal Care



Specialty Additives



\$1.0B ENGINEERED SOLUTIONS

Designed to improve our customers' manufacturing processes and projects



High-Temperature Technologies



Environmental & Infrastructure



Project based products and solutions
Environmental lining systems, **Water and remediation**, Drilling products and Building materials



Market Dynamics

- Global issue impacting all regions of the world
- Regulatory community has begun to promulgate regulations
- Public interest and litigation continue to drive awareness
- Total economic impact is still evolving
- Market has few cost-effective treatment options

MTI Value Proposition

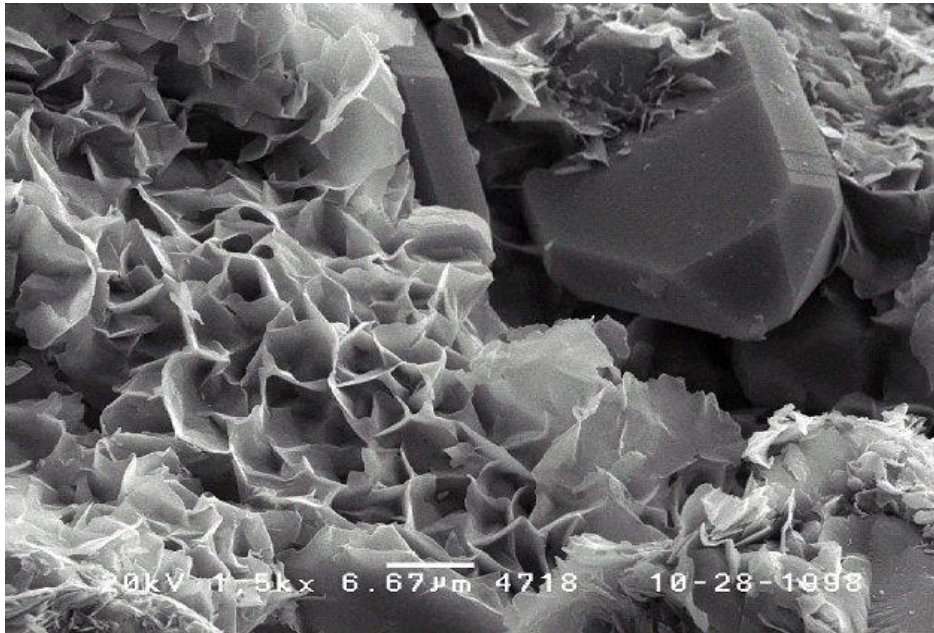
- Versatility in deployment allows participation in multiple PFAS-oriented verticals
- Can be utilized in standalone systems or as a component in multi-media systems
- Proven technology in real-world applications confirming years of university studies
- Best-in-class efficacy and total lifecycle costs
- Vertically integrated mineral reserves coupled with proprietary technology

Recent Developments

EPA National Drinking Water Regulation on 6 PFAS Compounds

CERCLA Designation Could Drive Environmental Cleanup of Contaminated Sites

EPA Collaboration with MTI

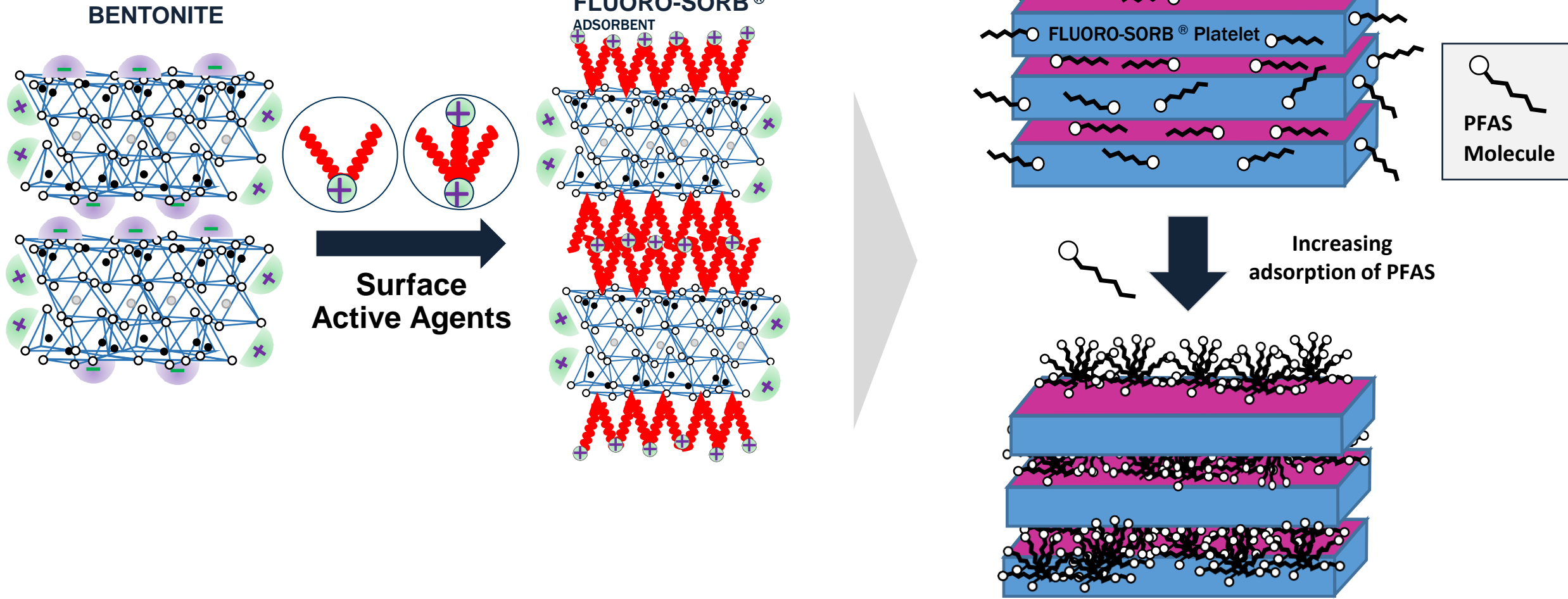


Unique bentonite properties:

- Contains montmorillonite platelets
- Each platelet is 1 nanometer thick and thousands of nanometers long and wide
- Platelets have very high surface area (800 m²/gram)
- Platelet surface is negatively charged – edges are positively charged



PFAS Adsorption Mechanism



MTI US Patent 11,000,822



Particle Surface Modification



Unique capability to design properties for versatile applications

FLUORO-SORB® P
ADSORBENT



SUBSURFACE INJECTION

FLUORO-SORB® 100
ADSORBENT



SOIL REMEDIATION (MIXING)

FLUORO-SORB® 200
ADSORBENT



**DRINKING WATER FILTRATION
GROUNDWATER FILTRATION**

FLUORO-SORB® 400
ADSORBENT



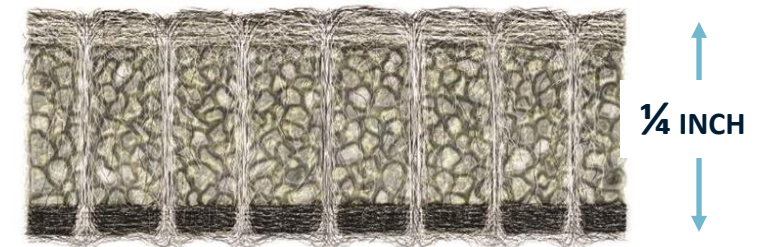
**SEDIMENT CAPPING
WASTEWATER FILTRATION**

FLUORO-SORB® 600
ADSORBENT



SURFACE WATER GRAVITY FILTRATION

**FLUORO-SORB®
REACTIVE CORE MAT®**



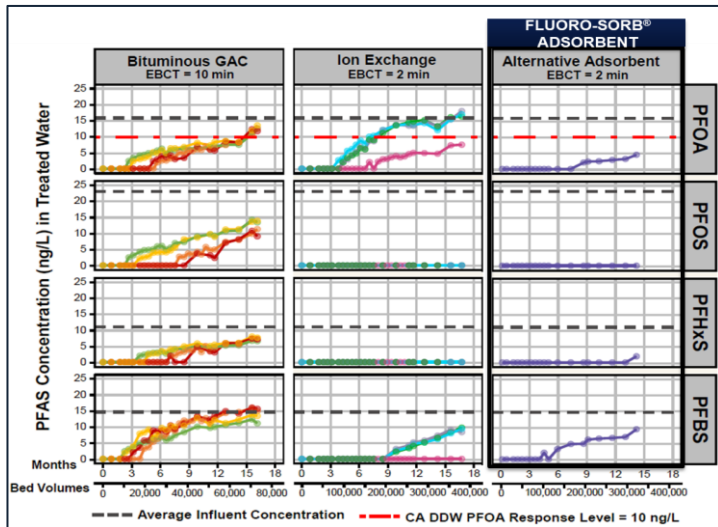
**SEDIMENT CAPPING
PASSIVE STORMWATER FILTRATION**



FLUORO-SORB® Adsorbent Performance

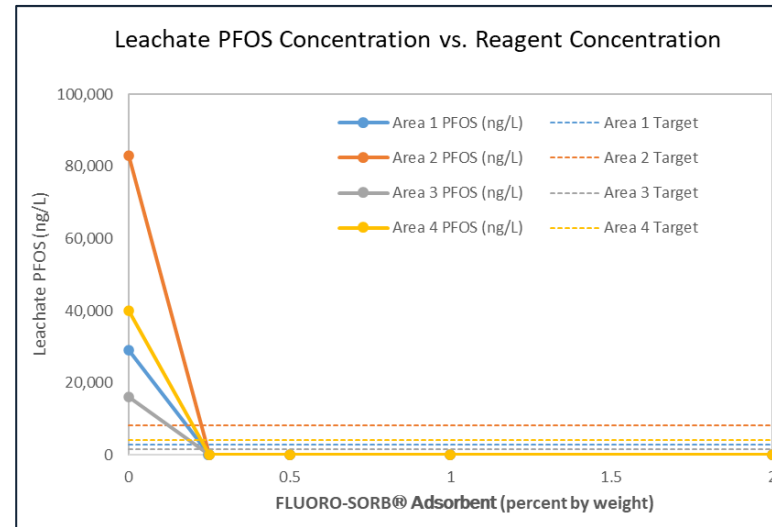


DRINKING WATER



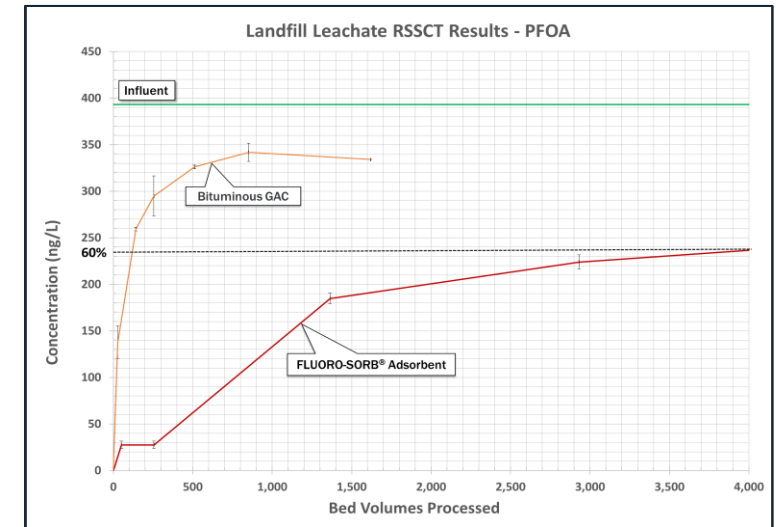
FLUORO-SORB® Adsorbent lasted longer than 8 different carbons and 4 different Ion Exchange media

IN SITU REMEDIATION SOIL STABILIZATION



FLUORO-SORB® Adsorbent reduced leaching in the soil 99.9% at 0.5% and 2.0% dosages

LANDFILL LEACHATE



FLUORO-SORB® Adsorbent can treat up to 30x the volume of PFAS-contaminated leachate before media changeout as compared to GAC

Source: Orange County Water District, "PFAS Phase I Pilot-Scale Treatment Study Final Report" (www.ocwd.com/wp-content/uploads/2021-03-24_ocwd-pfas-pilot-i_finalreport.pdf)

Source: CETCO/MTI Data for confidential customer

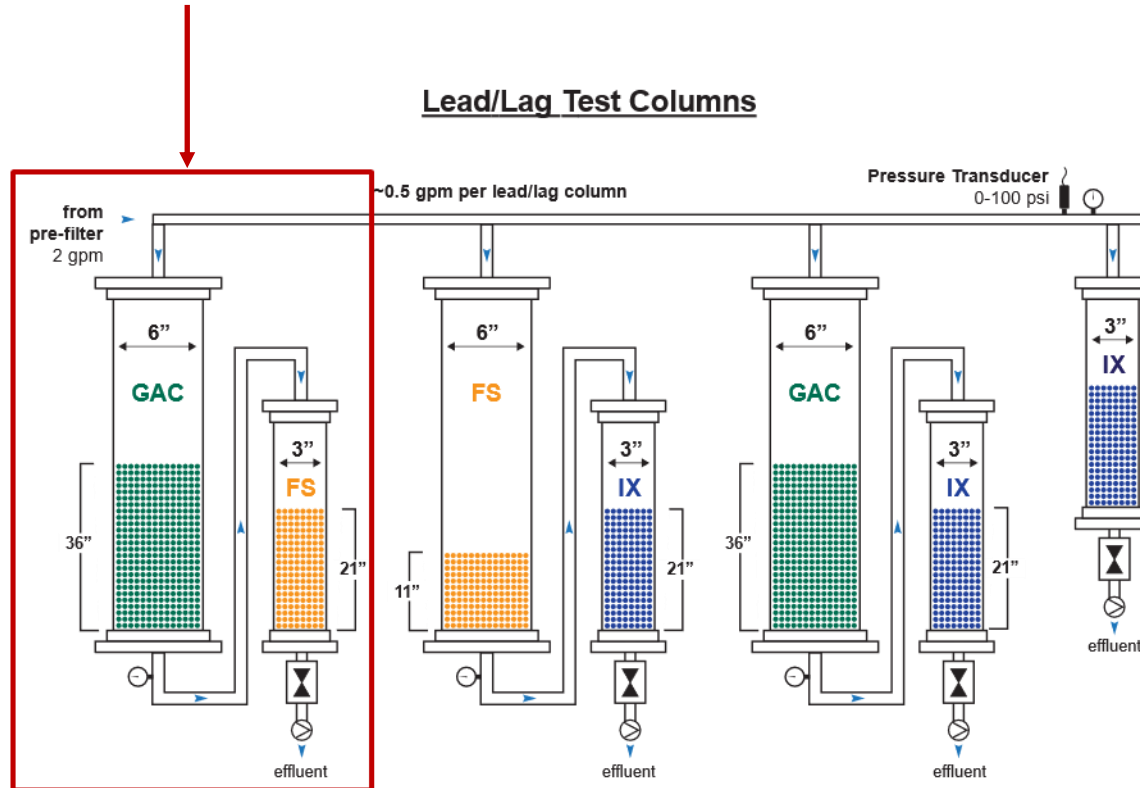
Source: Used by permission, Colorado School of Mines



FLUORO-SORB® Adsorbent Performance Dual Media Systems Performance Analysis



FLUORO-SORB® Adsorbent + GAC Exhibits Best Performance for PFAS and Chlorinated Organics



DoD ESTCP* Groundwater Project

Challenging Water Conditions:

- High salt concentrations (costal)
- High Total Organic Carbon (TOC)
- Chlorinated Organics
- PFAS

Takeaways:

- Dual media system required
- FLUORO-SORB® Adsorbent + GAC achieved the best performance of all combinations

FLUORO-SORB® Adsorbent

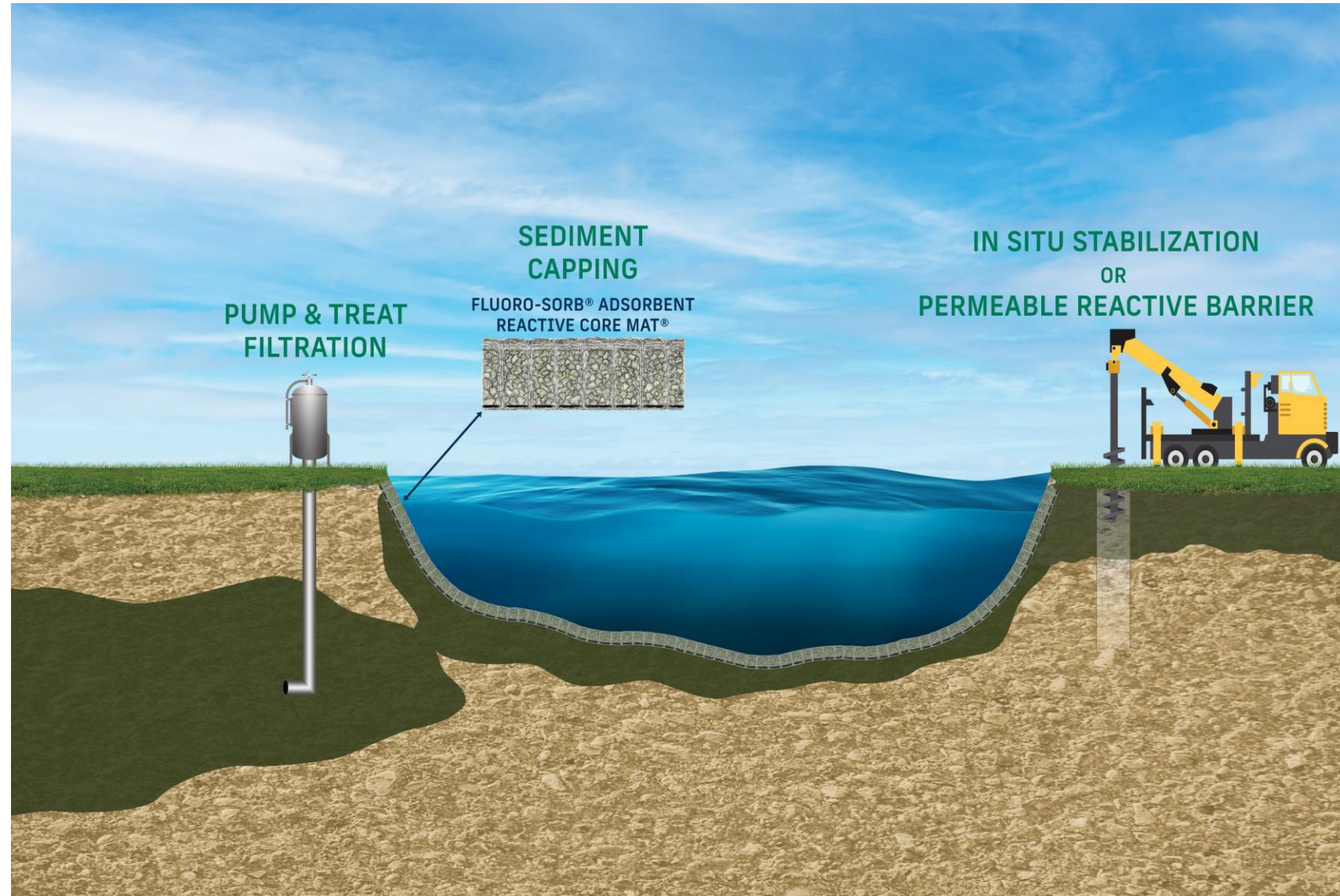
Versatility of Deployment



Technology designed to selectively adsorb PFAS from water and sediments

FLUORO-SORB® Adsorbent interacts with PFAS, thus spread of contamination is controlled

Engineered manufacturing capabilities allow product variations resulting in enhanced versatility





**DRINKING
WATER**



**LANDFILL
LEACHATE**



WASTEWATER



REMEDIATION

250+ ACTIVE PILOTS AND STUDIES ACROSS ALL VERTICALS

Total N. America
Opportunity

3,900-6,600 Sites
EPA limit* Impacts

2600+
MSW Landfills

3,000+ Municipal/
Industrial sites**

30,000+
Gov't/Industrial Sites†

Global Projects in MTI
Pipeline

300+

120+

35+

75+

FLUORO-SORB® Adsorbent

Examples of Recent Full-Scale Deployments



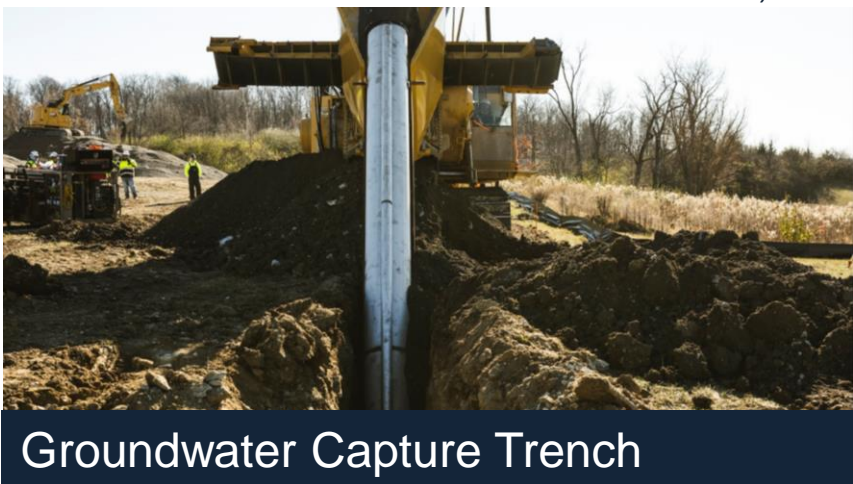
In-Situ Soil Stabilization

Photo by CETCO



Municipal Drinking Water

Photo by AqueoUS Vets



Groundwater Capture Trench

U.S. Air Force photo by Hannah/DIGITAL



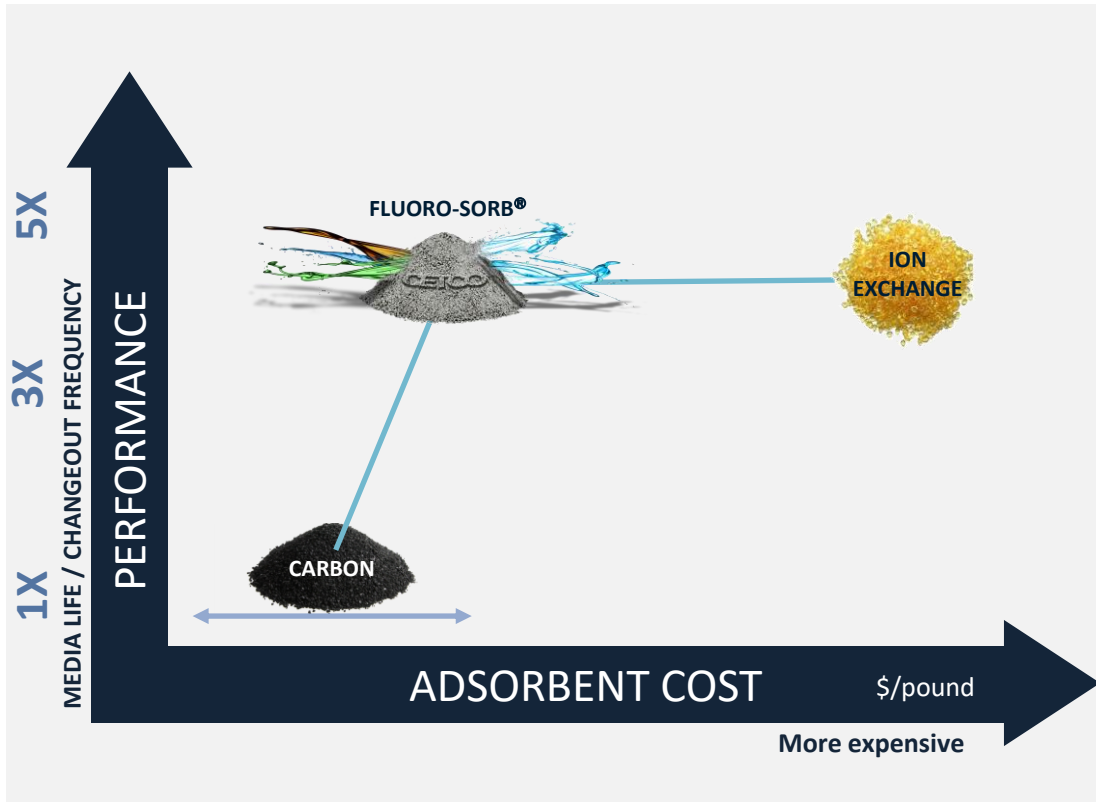
Stormwater Mitigation

Photo by QM Environmental

FLUORO-SORB® Adsorbent Value Proposition



Operating Efficiency



Kinetics and Capacity

Media	Carbon	Ion Exchange	FLUORO-SORB®
Contact time with media bed*	10 minutes	2 minutes	2 minutes

+



*Amount of time that the water is in contact with the media bed

FLUORO-SORB® Adsorbent = Higher Performance + Lower Capital Cost + Lower Operating Cost



Versatility of Deployment

Demonstrated Cost Effectiveness

**Outperforms Other Sorbent
Products**

Full-Scale Deployments

Patented

**Mineral Reserves Coupled with
Proprietary Technology**

Recent Developments

EPA National Drinking Water
Regulation on 6 PFAS Compounds

CERCLA Designation Could Drive
Environmental Cleanup of
Contaminated Sites

EPA Collaboration with MTI

PFAS Remediation Technology: FLUORO-SORB® Adsorbent



FLUORO-SORB®
ADSORBENT