# **Proven PFAS Remediation Technology Promises to Save DoD Billions**

## Published Research of Wurtsmith Air Force Base Shows Potential for Over 60% Savings

### 1 | Introduction

Too often the US Department of Defense (DoD) contractors default to the installation of pump and treat systems to mitigate PFAS pollution in groundwater. This approach has been proven inefficient and will not flush the aquifer free of PFAS. It serves only as a plume containment strategy. The use of in-ground colloidal activated carbon filtration (in situ CAC filtration) is a proven PFAS remediation approach. It presents a much more cost-effective and resilient solution, while avoiding the liability and long-term risk of PFAS waste. Where appropriate, in situ CAC filtration has the potential to reduce the DoD PFAS-related environmental liability by billions of dollars over the next 30+ years.



Recognized remediation experts Jeremy Birnstingl<sup>1</sup>, and John Wilson<sup>2</sup> recently published a research paper<sup>3</sup> discussing the high cost the DoD is paying to contain a PFAS plume at an existing DoD installation employing a typical pump and treat approach. Further, the paper compares the costs of operating the current remediation system with the costs of installing and operating an in situ CAC filtration system.



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#### 1.1 | Key Takeaways

- Pump and Treat will not flush PFAS from the aquifer even after 100+ years of pumping
- Over 60% Cost Savings For the subject site, in situ CAC filtration was shown to be about <sup>1</sup>/<sub>3</sub> the cost of pump and treat systems over a 30-year period (\$7.2M vs \$19M)

#### 1.2 | Other Considerations

- Zero Waste Unlike pump and treat systems that generate hazardous PFAS waste, in situ CAC filtration generates no waste
- Reduces Risk and Liability In situ CAC filtration eliminates the need to transport PFAS waste generated through public streets to a hazardous waste disposal facility and risking future liability
- No Energy or O&M Required In situ CAC filtration effectively contains the PFAS plume while requiring no energy input or on-going operation and maintenance



Graph represents comparative technology costs (2015–2115). Comparative annual and cumulative costs for the WAFB FT-02/ Clark's Marsh P&T system and hypothetical in situ CAC barrier meeting the same design objectives.

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- "A Cost Comparison of Pump-and-Treat and In Situ Colloidal Activated Carbon for PFAS Plume Management" ©2024, Authors Birnstingl,
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