



Per- and Poly-Fluoroalkyl Substances



Jacobs has been at the forefront of PFAS assessment and research for over a decade, advancing the global effort to characterize, treat and remediate PFAS in air, soil, groundwater, drinking water, wastewater, and wastewater residuals (biosolids).

Characterization and Treatment Solutions

Jacobs provides full characterization and treatment solutions for per- and polyfluorinated substances (PFAS) to clients worldwide. Our multi-disciplinary technical and management teams have performed this work for U.S. and international departments of defense, national environmental agencies, water utilities, landfills, and commercial airports, as well as private sector clients, including Fortune 500 industrial giants.

For more than a decade, we have closely monitored PFAS regulatory and technical developments to ensure that Jacobs continues to be the leader in developing solutions for existing and emerging contaminants. And we have partnered with clients, universities, and remediation vendors to develop and validate innovative and cutting-edge research and solutions to better understand and address this public health threat.

What Makes PFAS a Concern?

PFAS are a large family of organic compounds, including more than 3,000 manufactured fluorinated organic chemicals used since the 1940s in industrial and household products. They have the unique combination of high persistence, solubility, and environmental mobility.

Exposure to PFAS can occur through several pathways, including ingestion of food, drinking water, and indoor air. Due to their widespread use and persistence in the environment, most people in the U.S. and in countries around the world have been exposed to PFAS. Studies indicate that exposure to some PFAS may lead to adverse human and ecological health risks.

Our Work Approach

Jacobs' philosophy is to provide the best talent to work on the most difficult problems. Our emerging contaminants experts are industry leaders with decades of experience managing complex investigation and remediation projects. As a top ranked Environmental firm, our leadership is predicated on deep knowledge of our clients' industries and processes, combined with a thorough understanding of PFAS chemical behavior, real and perceived risks, and evolving treatment approaches.

Because of our depth of experience performing these services, we understand that multidisciplinary teams are required to undertake planning, drilling, sampling, analysis, treatment implementation, monitoring, and system operations.

Additionally, in situations where mobile compounds are identified in private residential wells, Jacobs has delivered sampling, remediation, public centralized treatment, and household PFAS treatment services to residents on behalf of our clients. On all our projects, we provide client-specific health, safety, and quality control to deliver a superior outcome, while being sensitive to community concerns..

Contact us

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How Jacobs Can Help

We partner with impacted facility owners, working through the assessment and mitigation stages of PFAS projects. Our extensive experience allows for a high degree of confidence in successful execution, utilizing industry-leading concepts and tools and collecting data of the highest quality standards.

Characterization: To understand the extent of the problem, we identify type, amount, and locations of PFAS through interviews with personnel, monitoring, site investigations, characterization, and hydrogeology. And we apply the latest understanding of PFAS mobility to develop representative transport models and assess future exposures.

Mitigation Strategy & Solutions: We plan and develop regulatory-compliant mitigation strategies, which include:

- Proven, cost-effective treatment solutions
- Watershed protection and management approaches
- Upgrades to existing water or wastewater treatment facilities
- Solid waste management strategies, including soils and biosolids.

Community Involvement & Communications Strategy: Jacobs develops effective communication strategies and offers guidance and support for private, municipal, and federal clients, including developing Community Involvement Plans, facilitating public meetings, and providing web-based engagement tools, such as our PFAS Dashboard, prepared for the U.S. Navy.

Jacobs' PFAS expertise includes:

- Testing more than 20,000 groundwater and soil samples for PFAS (PFAS sampling is complex and requires specific knowledge to avoid false positives or negatives)
- Writing the U.S. Navy Standard Operating Procedure for PFAS sampling
- Validating, in conjunction with academic analytical chemists, field screening methods and better sampling protocols for more representative results
- Designing, installing, and operating groundwater treatment systems
- Evaluating advanced treatment systems for complex media such as wastewater, biosolids and leachate
- Writing guidance on human health and ecological risk assessment and remediation for the Interstate Technology & Regulatory Council PFAS Guidance Document and performing PFAS training on these topics for regulators, facility owners, and consultants across the U.S.
- Leading and supporting aquatic toxicity, characterization, and treatment research for understudied PFAS

About Jacobs

At Jacobs, we're challenging today to reinvent tomorrow by solving the world's most critical problems for thriving cities, resilient environments, mission-critical outcomes, operational advancement, scientific discovery and cutting-edge manufacturing, turning abstract ideas into realities that transform the world for good. With \$14 billion in revenue and a talent force of approximately 55,000, Jacobs provides a full spectrum of professional services including consulting, technical, scientific and project delivery for the government and private sector.