

PFAS SOLUTIONS & DESTRUCTION

Battelle is at the forefront of site assessment and remediation for the per- and polyfluoroalkyl substances (PFAS) that are rapidly undergoing regulatory and statutory reviews at the state and federal level. We're conducting urgently needed research to better understand the fate and transport of these chemicals at contaminated sites and how to destroy them to minimize environmental and human health concerns.

LEADING THE WAY





Battelle has a specific mission as an independent, nonprofit organization to bring scientific solutions to government and industry for the benefit of society. Our robust internal research and development program is focused on solving today's environmental challenges.

It is clear there is a growing need for the U.S. government, states with PFAS concerns, and a variety of industries to collaborate in advancing tested and proven PFAS assessment and mitigation solutions. Such solutions offer critical information needed to make informed decisions based on the best available science.

PFAS Annihilator™ DESTRUCTION TECHNOLOGY

There are multiple technologies needed to address PFAS challenges, but Battelle's key technology is getting rid of them forever. Our tested technology addresses the critical need to destroy these substances, preventing them from transferring elsewhere and without creating harmful byproducts. PFAS Annihilator's closed-loop, mobile, on-site technology is powered by supercritical water oxidation (SCWO). It destroys PFAS to less than 5 parts per trillion in less than 10 seconds.

Tackling PFAS Challenges with a Comprehensive Suite of Technologies and Services

 ANALYTICAL TOOLS	 SITE ASSESSMENT	 DESTRUCTION	 HEALTH
PFAS Signature® Identifying the distinct patterns of PFAS chemicals for source tracking	PFAS Predict™ PFAS groundwater transport simulator	PFAS Annihilator™ Achieve complete PFAS destruction with inert end-products	Public Health and Policy Review of state and federal policies, data collection and analysis, studies of interaction effects, and impact analysis
Total Organofluorine Produce a rapid indication of the presence of total PFAS	PFAS Insight™ Simple-to-operate passive sampler for monitoring contamination in aquatic systems	GAC Regeneration Novel method for removing PFAS from granular activated carbon (GAC)	Exposure Studies Investigations of various pathways and biomarkers for exposure measurements – material health and new biomarkers
Additional PFAS Compounds Adding new and emerging PFAS compounds to analytical methods	Incineration Study Evaluate extent of PFAS destruction from incineration of sewage sludge	Stabilization Evaluate sorbents for stabilizing PFAS in-situ	Toxicology In vivo in vitro studies to investigate the impact of different compounds and concentrations
Optimized Total Oxidizable Precursor (TOP) Assay Improve results from published assay to account for co-contaminants	PFAS Air Insight™ Develop methodology for ambient air monitoring	Bioremediation Identify unique microorganisms capable of enzymatic catalysis of the CF bond and develop molecular diagnostic tools	Epidemiology and Surveillance Focus on long range, geographically focused and demographical studies on populations

Every day, the people of Battelle apply science and technology to solving what matters most. At major technology centers and national laboratories around the world, Battelle conducts research and development, designs and manufactures products, and delivers critical services for government and commercial customers. Headquartered in Columbus, Ohio since its founding in 1929, Battelle serves the national security, health and life sciences, and energy and environmental industries. For more information, visit www.battelle.org.

800.201.2011 | solutions@battelle.org | www.battelle.org/pfas

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ID 767 03/21

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It can be done