Addressing PFAS in Environmental Due Diligence

AECOM is a recognized industry leader on PFAS with worldwide, multi-country experience since 2001 in all aspects of PFAS investigation and risk assessment.

Areas of Expertise

- Transactional Due Diligence
- Historical Site Research
- EHS Compliance Reviews and Audit Program Development
- Liability Estimating
- Preliminary Assessment
- Remedial Investigations/Feasibility Studies/Records of Decision
- Tracking Continuing Research and Development
- Regulatory Tracking and Client Alerts

Overview

The ever changing requirements for per- and polyfluoroalkyl substances (PFAS) present increased risks associated with acquisitions and divestitures. Documentation of PFAS-contaminated sites and facilities that manufacture/store/use PFAS is limited but will become more available with regulatory requirements. How PFAS are regulated varies from country to country, and within the U.S., state by state. The U.S. Congress is evaluating whether to include PFAS or a subset of PFAS as hazardous substances under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). Likewise, the American Society for Testing and Material (ASTM) may consider changing how emerging contaminants not currently identified as CERCLA hazardous are addressed in revisions to ASTM 1527-13 (*Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*), as several states have proposed or already have PFAS regulatory requirements related to water quality concerns.

Since 2001, AECOM has worked at over 400 PFAS sites globally. Our teams have direct experience successfully executing PFAS site characterization and contamination investigations at commercial, industrial, and military sites. Combined with our deep understanding and in-depth knowledge of local/federal regulatory compliance practices and Environmental, Health & Safety (EHS) requirements, our teams provide clients with a fully integrated approach to offer practical business advice in an ever-changing regulatory landscape concerning PFAS. AECOM works with clients to tailor assessments in addressing their PFAS-related concerns, remaining at the forefront of PFAS regulatory requirements.

Our Approach

AECOM's PFAS and Environmental Due Diligence practitioners work as a team in conducting all appropriate inquires guided by the ASTM 1527 Standard. Our teams closely track PFAS regulatory developments. We've established global and regional leaders that support PFAS projects and understand how to work closely with local teams.

AECOM's Technical Practice Groups enable staff to share knowledge, lessons learned, and best practices with respect to regulatory compliance, scientific research advancements, strategies for solving complex waste management, PFAS chemistry/environmental behavior, site characterization and PFAS source identification, and local/federal regulations. Our due diligence practitioners benefit from this expertise and have a deep knowledge base of CERCLA requirements, which means we are able to provide expert consultation to our clients in addressing potential environmental liability.

AECOM has developed a systematic approach to evaluate potential liabilities associated with property transactions, placing risks in perspective for clients to make informed business decisions. Likewise, our teams have developed a fundamental approach to PFAS management and have become trusted partners with our clients, executing streamlined regulatory and scientifically defensible investigative approaches and focused technological solutions, diminishing our clients' risks.

Our teams are well placed to guide clients through the identification, evaluation, management and, if warranted, remediation of PFAS. We have worked with multi-national oil clients, the Department of Defense, chemical industry, commercial airports, private wastewater treatment plants, and other commercial/industrial clients, providing informed advice around the impact of state, federal and international legislation associated with the use, storage and disposal of PFAS-containing materials. The regulatory landscape around the storage, use and remediation of PFAS is changing rapidly and through its evolution, AECOM has the capabilities to address environmental liability as outlined by USEPA and individual states.

Areas of Expertise

- **Transactional due diligence** including Phase I ESAs and mergers and acquisitions
- **Historical site research** to understand ownership and property history addressing potential liability and prospective purchaser limitations
- **EHS compliance reviews and audit program development** supporting compliance assurance to reduce regulatory liability implemented through a global practice standard
- **Liability estimating** including Monte Carlo analysis
- **Preliminary Assessment** to identify potential sources of PFAS and assess risks associated with storage of Aqueous Film Forming Foam and other PFAS-containing materials
- **Remedial Investigations/Feasibility Study/Record of Decision** support for addressing PFAS contamination and developing clean-up approaches
- **Forensics Analysis** of complex PFAS datasets to identify sources, provide a roadmap for further investigation, and provide robust conclusions and solutions
- **Tracking continuing research and development** of PFAS characterization techniques, fate and transport modeling, remedial design, and destruction technologies
- **Regulatory tracking** on PFAS including drinking water standards and regulatory clean-up

More Information: AskEnvironment@aecom.com

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Key Reference Materials

- The current ASTM Standard for Phase I ESAs does not address PFAS or other emerging contaminants as scope items and revisions are uncertain at this time.
- In 2016, USEPA revised the Lifetime Health Advisory Levels for perfluorooctanesulfonic acid (PFOS) and perfluorooctanoic acid (PFOA) in drinking water to 0.070 micrograms per liter (70 parts per trillion [ppt]) or a combined PFOS/PFOA concentration of less than 70 ppt. State environmental and health agencies are setting their own standards, often lower than USEPA's.
- Since 2019, Environmental Data Resources has been compiling PFAS databases available for transactional due diligence, providing lists of sites tested for PFAS by state agencies. Many PFAS-contaminated sites may not be listed until state agencies make information publicly available.
- In December 2019, USEPA issued Interim Recommendations for Addressing Groundwater Contaminated with PFOA and PFAS under federal clean-up programs. The guidance recommends using a screening level of 40 ppt to determine if PFOA/PFOS is present and USEPA's 2016 Lifetime Health Advisory Level of 70 ppt as the preliminary remediation goal for groundwater used as drinking water.
- On June 22, 2020, USEPA published a final rule (85 FR 37354) adding 172 PFAS substances to the Toxic Release Inventory (TRI) list of regulated toxic chemicals under Section 313 of the Emergency Planning and Community Right-to-Know Act. Facilities in TRI-covered industry sectors are to track and collect data on these PFAS chemicals as of 2020 by July 1, 2021. Until this time, no documented information is available on facilities that manufacture, store, or use PFAS.

Key AECOM Attributes

- Understanding of the complexities of PFAS chemistry and unique behavior when released into the environment
- Awareness of the potential presence of PFAS in specialty products
- Ability to identify potential off-site PFAS sources and apply statistical techniques (e.g., chemometrics) as a forensic tool using complex PFAS datasets providing powerful data visualizations
- Worldwide, multi-country experience in all aspects of PFAS investigation, risk assessment and remediation in consulting, research, and regulatory developments
- Almost 20 years of experience providing technical support and advocating for clients, identifying potential sources of PFAS on site and contamination outside site boundaries
- Knowledge of USEPA federal public drinking water sampling data and local/federal drinking water criteria related to PFAS
- Understanding of key scope considerations as outlined in the ASTM Standard and their limitations in a due diligence context, with respect to future inclusion of emerging contaminants

AECOM is a leader in treatment of PFAS-impacted drinking water, wastewater, and groundwater: Our DE-FLUORO™ treatment system has shown complete destruction of PFAS in pilot studies.

DE-FLU•RO™
PFAS DESTRUCTION TECHNOLOGY

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