



DE-FLUORO™

PFAS Destruction Technology

The uniquely engineered properties of Per- and Poly- Fluoroalkyl Substances or 'PFAS' mean that conventional technologies stop well short in effectively addressing this contaminant.

AECOM's vision is to identify long-term solutions for our clients to investigate, manage and remediate PFAS, and in doing so establish ourselves as the global lead for PFAS solutions and technology.

HOW CAN AECOM HELP?

AECOM has been focused on PFAS since 2001 and has become a recognised global industry leader. We have worked on over 200 PFAS projects globally, including 100 in Australia, and successfully managed two of Australia's largest PFAS investigations.

In Australia and New Zealand, we are well placed to guide our clients through the identification, management and remediation of PFAS, which is evidenced through our work with the Defence, Aviation and Oil and Gas sectors.

Our specialist PFAS services include:

- Site assessment (soil and groundwater)
- Community and stakeholder engagement
- Human health risk assessment
- Ecological risk assessment
- Toxicology assessments
- Technology development
- Remediation solutions (incorporating AECOM's own Destruction Technology - DE-FLUORO™).

To date, our work has focused on the investigation and management of PFAS.

AECOM has a dedicated PFAS Response Team which was formed to strategically solve the challenging environmental issues that PFAS has created by developing a world-first, cost-effective, sustainable PFAS destruction solution.

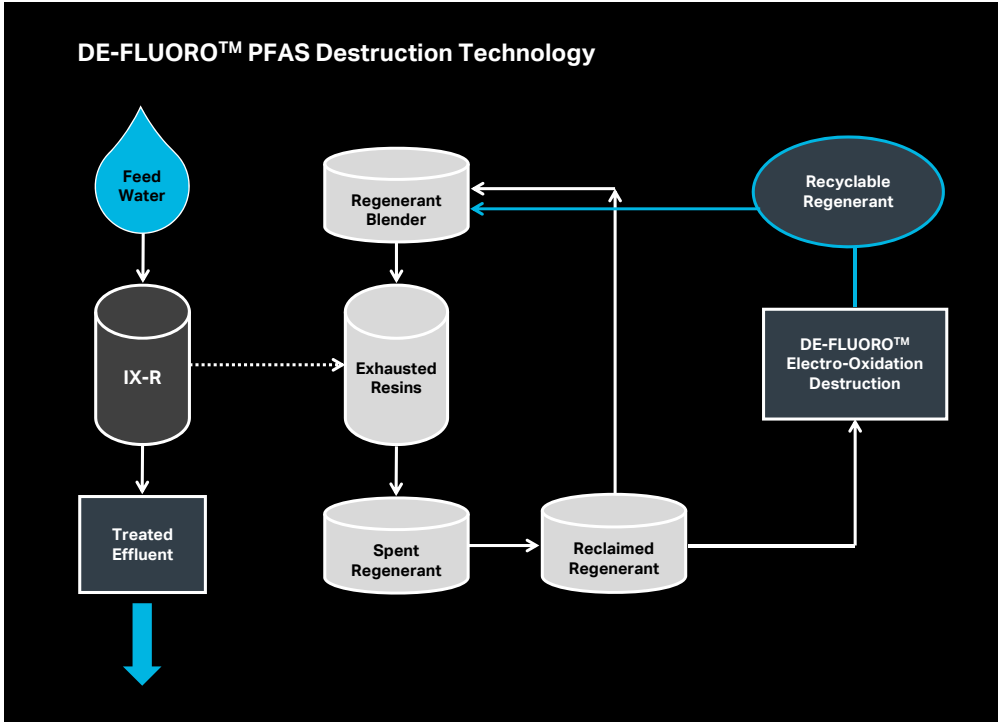
WHAT IS DE-FLUORO™ AND WHY IS IT UNIQUE?

Our technology – trademarked as DE-FLUORO™ – was developed by AECOM in collaboration with the University of Georgia in the United States. It is an economically and environmentally sustainable water treatment technology that destroys PFAS without generating any hazardous waste.

Unlike existing treatment technologies, DE-FLUORO™ offers a complete PFAS destruction solution through electrochemical oxidation. It can be coupled with existing technologies to deliver a ‘whole of life cycle’ solution, or as a stand-alone onsite destruction technology to solve our clients’ PFAS issues and avoid costly offsite disposal.

DE-FLUORO™ has been verified across a variety of industry sectors including Government, Aviation, Oil & Gas and Industrial, as well as with remediation water treatment contractors during our ‘Real World’ PFAS Destruction Program. Concentrations of PFAS evaluated to date have ranged from 27ppb, all the way in excess of 6,000,000 ppm and included PFAS impacted surface and groundwater, remediated wastewater and AFFF concentrate with 3M Light Water.

WHOLE OF LIFE CYCLE SOLUTION



'REAL WORLD' PFAS DESTRUCTION PROGRAM

DE-FLUORO™ has demonstrated its capability to destroy PFAS during our 'Real World' PFAS Destruction Program, using eight industry provided samples, with a diverse range of PFAS concentrations (27ppb- 6,000,000 ppm).

- DE-FLUORO™ destroyed between 98% to 100% of all regulated PFAS mass, in 75% of samples treated
- DE-FLUORO™ destroyed between 90% to 100% of the total PFAS mass in the majority of samples treated
- DE-FLUORO™ treats both measurable and unmeasurable PFAS compounds
- DE-FLUORO™ treats solutions composed of a range of PFAS compound signatures, including solutions containing a mixture of, or dominated by, sulfonic acids, carboxylates, sulfonamides and fluorotelomers
- DE-FLUORO™ is not limited by PFAS concentration nor the presence of other contaminants (organic or inorganic).

The results of the 'Real World' PFAS Destruction Program demonstrated that DE-FLUORO™ is a feasible PFAS destructive technology, across a range of industry sectors, varied waste streams and extensive ranges of PFAS concentrations.

Following the success of our DE-FLUORO™ 'Real World' PFAS Destruction Program, AECOM has designed and built a field-scale mobile DE-FLUORO™ treatment system that contains multiple, large scale reactors and can be scaled specifically for your site.

The design of the field scale system has been optimised in order to:

- Decrease residency (treatment) time
- Increase the influent throughput (volumetric) rate
- Improve the energy efficiency of the treatment process
- Enhance the capacity of the treatment process in order to destroy extremely elevated concentrations of PFAS in solution (i.e. AFFF concentrate).

We are confident that DE-FLUORO™ will meet your requirements either as a coupling destruction technology to complement existing onsite PFAS separation approaches, or as a stand-alone treatment technology. In order to demonstrate how effective DE-FLUORO™ will be at efficiently and economically destroying PFAS on your site, please contact us to arrange an onsite Pilot Demonstration Program.

CONTACT THE TEAM

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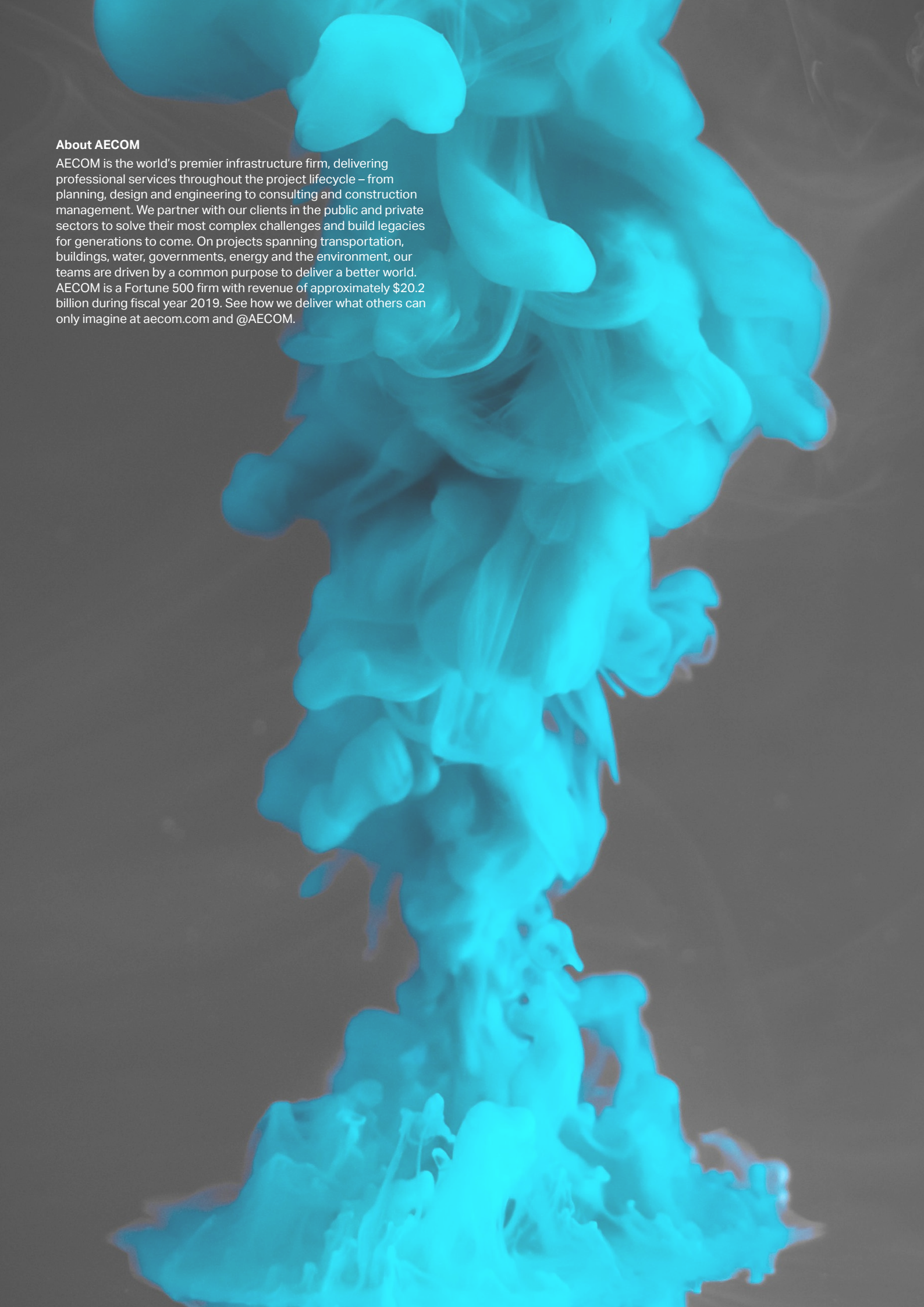
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About AECOM

AECOM is the world's premier infrastructure firm, delivering professional services throughout the project lifecycle – from planning, design and engineering to consulting and construction management. We partner with our clients in the public and private sectors to solve their most complex challenges and build legacies for generations to come. On projects spanning transportation, buildings, water, governments, energy and the environment, our teams are driven by a common purpose to deliver a better world. AECOM is a Fortune 500 firm with revenue of approximately \$20.2 billion during fiscal year 2019. See how we deliver what others can only imagine at aecom.com and [@AECOM](https://twitter.com/AECOM).