ALERTER

PFAS, Aqueous Film-forming Foam & Contaminated Land: Litigation Risk & Lessons from other Jurisdictions

Toby Riley-Smith KC
Tim Green KC
Lucy McCormick
Douglas Maxwell



INTRODUCTION

This is the fourth in our series of articles on PFAS. We addressed the policy background in our earlier Alerters "Forever Chemicals Litigation: here to stick?", "Publication of DEFRA Policy Paper: 'PFAS Plan: building a safer future together'" and "The end of 'whack-a-mole'". This Alerter examines the litigation risk for those who own, operate or let land where aqueous film-forming foam ("*AFFF*") has been used, and what more advanced litigation in other jurisdictions suggests about how such claims may develop in the UK.

For half a century, AFFF was the standard for fighting liquid-fuel fires at airports, military bases and industrial sites. Much of it contained PFOS or PFOA, two of the best-known per- and polyfluoroalkyl substances ("*PFAS*").

By 2025, the Environment Agency (the "*EA*") is known to have served notices under regulation 61 of the Environmental Permitting (England and Wales) Regulations 2016, requiring 24 commercial airports in England to test for PFAS. Reports indicate that 17 test results showed elevated PFAS levels. In April 2026, the House of Commons Environmental Audit Committee (the "*Committee*") recorded the EA's 2023 estimate that remediating 2,900 to 10,200 high-risk sites in England would cost £31 billion to £121 billion. Under the Government's PFAS Plan, the EA's PFAS prioritisation map is to be shared with the public sector by the end of 2026, with a public website to follow in 2027. The Committee recommended that the polluter pays principle be applied to PFAS remediation and that the Government consult by March 2027 on a national remediation fund, financed in part by a levy on emissions of PFAS on the UK REACH candidate list. The Government's response, published on 6 July 2026, made no significant new commitments: it reaffirmed the Plan, undertook only to explore levies, remediation funds and other financing mechanisms, and committed to reforming UK REACH by December 2028.

THE REGULATORY REGIME

The three most important regulatory regimes are:

The Environmental Permitting (England and Wales) Regulations 2016 (SI 2016/1154) provide a single system of environmental permitting covering waste operations, industrial installations and discharges to water. Waste is defined as "*any substance or object which the holder discards or intends or is required to discard*". Industrial facilities handling or discharging waste, chemicals or wastewater must operate under permits enforced by the Environment Agency. Permit conditions for the more polluting (Part A) installations must include emission limit values and measures to protect soil and groundwater (Schedule 7). Under the PFAS Plan, the Government has undertaken to publish guidance on reducing PFAS emissions from industrial sites, to develop thresholds and standards for PFAS emissions to air, land and water, and to develop best available techniques

© 2026, Toby Riley-Smith KC, Tim Green KC, Lucy McCormick & Douglas Maxwell
This document is not to be used for the development of AI or expert systems without the express consent of its authors

PFAS, Aqueous Film-forming Foam & Contaminated Land:
Litigation Risk & Lessons from other Jurisdictions

Toby Riley-Smith KC, Tim Green KC, Lucy McCormick & Douglas Maxwell

for PFAS.

Section 161A of the Water Resources Act 1991 allows the EA in England (or Natural Resources Wales in Wales) to serve a "*Works Notice*" on a responsible person who caused or knowingly permitted PFAS contamination in controlled waters. A works notice can require only works relating to the matter that its recipient caused or knowingly permitted, so a degree of apportionment is built in. PFOS already has a statutory environmental quality standard under the river basin management regime, and in January 2026 the EA published thresholds for PFOS, PFOA, PFHxS and PFNA in surface waters, derived from the risk to human health from eating fish, which will inform its management of PFAS in the water environment.

Part 2A of the Environmental Protection Act 1990. The original polluter, and anyone who has knowingly permitted the substances to remain, is a Class A person. Knowing permission requires knowledge of the presence of the substances, not of the harm they may cause (*Circular Facilities (London) Ltd v Sevenoaks District Council* [2005] EWHC 865 (Admin) [43]), together with the ability to prevent or remove them. If no Class A person is found after reasonable inquiry, liability falls on the current owner or occupier as a Class B person (section 78F(4)). Notably, there is no limitation period.

How high is the bar?

Contaminated Land: Application in Real Environments ("*CL:AIRE*") interim Category 4 Screening Levels, published in 2024, are 0.60 mg/kg for PFOA, PFOS, PFHxS and PFNA on commercial land and between 0.0073 and 0.041 mg/kg on residential land, applied on a hazard index basis. Exceeding a screening level does not determine that land is contaminated, but it should prompt further assessment. There is no statutory standard for PFAS in drinking water in England or Wales. The Drinking Water Inspectorate's guidance, updated in March 2025, sets a guideline value of 0.1 micrograms per litre for the sum of 48 named PFAS, with a three-tiered response for water companies, and under the PFAS Plan the Government is to consult in 2026 on a statutory limit for England and stronger enforcement powers.

Is enforcement likely?

The Committee heard no evidence that Part 2A, a remedy of last resort, has been enforced against PFAS. Pressure is more likely to come through permits, works notices and planning conditions for redevelopment. The PFAS Plan promises new guidance for regulators and industry on legacy PFAS pollution on contaminated land, although the Government's July 2026 response accepted that further work is needed before the EA's technical work can be turned into clear guidance. However, the standards are tightening. PFOS, PFOA and PFHxS are listed as persistent organic pollutants under the GB Persistent Organic Pollutants ("POPs") Regulations, and on 10 September 2026 the Government confirmed that it will add long-chain perfluorocarboxylic acids to the list of prohibited substances and amend the PFOS entry, in line with the Stockholm Convention, by 16 December 2026.

The Health and Safety Executive has proposed a UK REACH restriction on PFAS in all firefighting foams, with an eighteen-month transition for training and testing and five years for civilian aviation sites. Its consultation on the restriction proposal closed in February 2026, a further consultation on its draft socio-economic assessment closed on 7 September 2026, and its final opinion is expected later in 2026. Under the Environmental Improvement Plan 2025, the Government has committed to decide in 2027 whether to implement the restriction. The EU restriction adopted in October 2025 prohibits

© 2026, Toby Riley-Smith KC, Tim Green KC, Lucy McCormick & Douglas Maxwell
This document is not to be used for the development of AI or expert systems without the express consent of its authors

PFAS, Aqueous Film-forming Foam & Contaminated Land:
Litigation Risk & Lessons from other Jurisdictions

Toby Riley-Smith KC, Tim Green KC, Lucy McCormick & Douglas Maxwell

their use, with limited exceptions, from 23 October 2030. The EU is also considering a universal restriction on PFAS across a wide range of uses, on which ECHA expects to complete its assessment by the end of 2026. The Government has said that it will follow EU decisions unless there are compelling reasons to diverge.

CLAIMS IN PRIVATE LAW

Contract

Where land has been let for fire training, three points recur.

First, general repairing covenants. In *Pullman Foods Ltd v Welsh Ministers* [2020] EWHC 2521 (TCC), a covenant to deliver up in good and substantial repair and condition obliged the tenant to remove buried asbestos. HHJ Keyser QC (sitting as a High Court judge) held that lack of knowledge "*might explain a failure to comply ... but cannot excuse it*" ([144]). The standard is set by the character of the premises at the time of letting, and general words read against a long-standing contaminative use may not require the removal of all contamination.

Second, the statutory cap. Damages for breach of a covenant to keep, put or leave premises in repair cannot exceed the diminution in the value of the reversion (Landlord and Tenant Act 1927, s 18(1)). The cap does not apply to covenants against discharging deleterious matter, to comply with legislation, or to remove contamination, or to indemnities. Under those, the cost of the works is recoverable where the landlord intends to carry them out and it is reasonable to do so (*Ruxley Electronics and Construction Ltd v Forsyth* [1996] AC 344 (HL)).

Third, self-help. A clause entitling the landlord to enter, carry out the works, and recover their cost as a debt avoids both section 18(1) and the Leasehold Property (Repairs) Act 1938 (*Jervis v Harris* [1996] Ch 195 (CA)). However, caution is necessary, particularly when carrying out exploratory testing. For example, a bare right to enter "*to inspect*" has been held not to authorise boreholes (*Heronslea (Mill Hill) Ltd v Kwik-Fit Properties Ltd* [2009] EWHC 295 (QB) [48]).

Tort

Escapes onto neighbouring land, drains or watercourses engage nuisance and the rule in Rylands v Fletcher, but only damage of a foreseeable type is recoverable (*Cambridge Water Co v Eastern Counties Leather plc* [1994] 2 AC 264 (HL) 306). One issue yet to be determined in the UK in relation to PFAS is the question of foreseeability.

A chemical change in soil is not actionable damage unless it has a substantial detrimental effect on the land. A single escape causing continuing damage is not a continuing nuisance (*Jalla v Shell International Trading and Shipping Co Ltd* [2023] UKSC 16 [25]), so once the source stops, time runs. Section 73(6) of the Environmental Protection Act 1990 also imposes strict civil liability for damage caused by unlawfully deposited waste.

Standing

Only those with an interest in land can sue in private nuisance (*Hunter v Canary Wharf Ltd* [1997] AC 655 (HL)). Those without a neighbouring proprietary right are confined to negligence, public nuisance or actions against public authorities and potentially under the Human Rights Act 1998. For example, reliance on Article 1 of Protocol No. 1 in hazardous pollution cases such as *Öneryildiz v Turkey* (2005) 41 EHRR 20. In each instance, it would be necessary to prove injury caused by exposure. Statutory nuisance under Part III of the Environmental Protection 1990 Act is unlikely to fill the gap, as section 79(1A) provides (in somewhat

© 2026, Toby Riley-Smith KC, Tim Green KC, Lucy McCormick & Douglas Maxwell
This document is not to be used for the development of AI or expert systems without the express consent of its authors

PFAS, Aqueous Film-forming Foam & Contaminated Land:
Litigation Risk & Lessons from other Jurisdictions

Toby Riley-Smith KC, Tim Green KC, Lucy McCormick & Douglas Maxwell

convoluted terms) "*No matter shall constitute a statutory nuisance to the extent that it consists of, or is caused by, any land being in a contaminated state*".

LESSONS FROM OTHER JURISDICTIONS

Australia: airports against their fire services

The closest analogues are arguably claims by airports against Airservices Australia, the statutory provider of aviation rescue and firefighting services, which trained on fire grounds leased from them.

In *Brisbane Airport Corporation Pty Ltd v Airservices Australia* [2025] QSC 54, the airport sued for nuisance and under the contamination indemnities in its leases, seeking A$17.3 million in past costs and continuing future costs arising from foam used between 1988 and 2010. Freeburn J refused an application to strike out parts of the claim. A demand that the airport plead which product, used by which operator, produced which compound, where and in what concentration, was a demand for evidence, not for material facts ([20]–[26]), and successive operators were concurrent tortfeasors, with contributions a matter for trial ([60]–[66]). The claim, issued in 2017, was listed for a twelve-week trial in 2026, but the airport's accounts for the year to 30 June 2026 record a settlement, with one-off settlement revenue of A$90.7 million, including Airservices' payment.

In *Perth Airport Pty Ltd v Airservices Australia* [2025] FCA 351, the airport pleaded claims in negligence, nuisance, breach of lease, and under statute, including for delayed development and diminution in the value of its reversion ([14]). Feutrill J allowed it to plead that PFAS are "*toxic (or potentially toxic)*", holding that it was reasonably arguable that introducing a potentially toxic substance onto land physically damages it ([28]–[29]), and that the operator's historical knowledge was squarely in issue ([33], [35]).

Australia: neighbours and the State

Class actions by landowners and businesses near the Australian Defence air bases at Williamtown, Oakey and Katherine (*Smith v Commonwealth of Australia (No 2)* [2020] FCA 837 [5]) settled for a reported A$212.5 million, and claims concerning seven more bases settled for A$132.7 million for loss of land value alone (*Haswell v Commonwealth of Australia (No 3)* [2023] FCA 1093 [4], [6]). In May 2026, the Commonwealth of Australia sued a supplier of AFFF for more than A$2 billion in respect of 28 bases, alleging it withheld what it knew about the environmental risks of its foam.

The United States

Many thousands of claims are consolidated in *In re Aqueous Film-Forming Foams Products Liability Litigation*, MDL No. 2873, in South Carolina, where the common questions identified at the outset included "*the knowledge of the AFFF manufacturers regarding the dangers of PFOA and PFOS*". In March 2024, the court approved a settlement with some 12,000 public water systems for US$10.5 billion to US$12.5 billion.

Attribution is a recurring obstacle to such claims. The United States Court of Appeals for the Sixth Circuit ordered the dismissal of a claim brought on behalf of Ohio residents with PFAS in their blood because the claimant had not plausibly alleged that any of the manufacturers he sued had caused the PFAS in his blood. The decision of Circuit Judge Kethledge starts: "*Seldom is so ambitious a case file on so slight a basis*" (*Hardwick* No. 22-3765 (6th Cir., 27 November 2023)).

The Channel Islands

In 1993, foaming water was found emerging from a field drain near Jersey Airport's fire training ground, and a farm's water supply was found to be contaminated. In 2004, the manufacturer

© 2026, Toby Riley-Smith KC, Tim Green KC, Lucy McCormick & Douglas Maxwell
This document is not to be used for the development of AI or expert systems without the express consent of its authors

PFAS, Aqueous Film-forming Foam & Contaminated Land:
Litigation Risk & Lessons from other Jurisdictions

Toby Riley-Smith KC, Tim Green KC, Lucy McCormick & Douglas Maxwell

agreed to pay £2.6 million towards costs of some £6.4 million under a deed whose terms and the manufacturer's name were to remain confidential (States of Jersey, P.176/2004). In another example, the State of Guernsey sued an AFFF manufacturer in the High Court in London for alleged historical pollution at Guernsey airport. The State of Guernsey discontinued the claim three weeks into the trial, resulting in a costs bill reported to be £8 million. The Guernsey airport case illustrates the potential scale and cost of remediation. In April 2026, the State of Guernsey was asked to approve up to £16.54 million to excavate an estimated 15,000 tonnes of contaminated soil, which must be exported to the UK for treatment and disposal.

PRACTICAL STEPS

While no two cases are the same, the following practical steps will be relevant to most AFFF related matters:

First, act early. Many potential disputes between commercial entities may only become apparent when leases change hands, end, are terminated, or the proposed use of the site changes. By then, positions may have hardened and records are often more difficult to obtain. The earlier parties can identify potential contamination, determine its source, and isolate or limit future contamination, the more likely it is that expensive litigation can be avoided. Time generally runs in tort from when actionable damage occurs and in contract from breach. However, a covenant to yield up in a given condition is only broken when the term ends, and there is no limitation period under Part 2A of the Environmental Protection Act 1990. When limitation is in doubt, a pre-emptive standstill agreement should be considered.

Second, consider the lease and ownership history with care. Fire training grounds at airports, military bases and industrial sites often have long and complex histories: successive freeholders, head leases and underleases, licences, contracted services, and changes of ownership on privatisation or sale. Older leases may have given little (or no) thought to liability for contamination or remediation, and where they do, the wording may be opaque, open to more than one reading, or inconsistent with earlier or later documents. Each document should be read against the use being made of the site when it was granted, with particular attention to whether liabilities survived assignment, surrender or expiry, to any renewal granted without a schedule of conditions, and to any dilapidations settlement or release given at the end of an earlier term.

Third, expert evidence. All disputes concerning alleged pollution will depend on expert evidence. It is likely that expert evidence will be required on hydrogeology to establish the location of PFAS and whether they have reached controlled waters or neighbouring land. Environmental chemistry evidence will be required to attribute identifiable PFAS to a source and time period, since the compounds present can potentially identify the source and/or use. This evidence can also inform remediation and may frame pleadings responses to allegations as to which compound, produced by which entity, is alleged to have caused the pollution. The pool of suitably qualified experts is relatively small, so conflicts should be checked and suitable experts should be instructed early.

Fourth, preserve and catalogue the evidence. The cases from other jurisdictions cited above, such as Perth Airport and cases from the United States, turned on what operators and manufacturers knew. Purchase records, safety records, training and incident logs, earlier site investigations, and correspondence with entities such as the

© 2026, Toby Riley-Smith KC, Tim Green KC, Lucy McCormick & Douglas Maxwell
This document is not to be used for the development of AI or expert systems without the express consent of its authors

PFAS, Aqueous Film-forming Foam & Contaminated Land:
Litigation Risk & Lessons from other Jurisdictions

Toby Riley-Smith KC, Tim Green KC, Lucy McCormick & Douglas Maxwell

Environment Agency should be located and preserved. In any event, a party that knows may become party to proceedings and has a duty to take reasonable steps to preserve relevant documents (for example, see the Business and Property Courts, PD 57A para. 3.1).

Fifth, engaging with regulators and insurers. Section 78H(5)(b) of the Environmental Protection Act 1990 provides that "*The enforcing authority shall not serve a remediation notice on a person if and so long as any one or more of the following conditions is for the time being satisfied in the particular case, that is to say* – […] *(b) the authority is satisfied that appropriate things are being, or will be, done by way of remediation without the service of a remediation notice on that person*". Accordingly, there is scope to agree what remediation is required before the Environment Agency imposes it. Furthermore, parties must remain vigilant to comply with their notification obligations to insurers and to review their coverage.

Sixth, plan your investigation. If you have concerns about PFAS and an investigation yields knowledge, it follows that an owner or occupier becomes a knowing permitter under Part 2A of the Environmental Protection Act 1990. Further, ignorance is not an excuse. The person responsible for the remediation of contaminated land following the "polluter pays" principle under Part 2A of the 1990 Act includes two categories of "appropriate persons": (i) "*Class A*" are persons who caused or knowingly permitted the contaminated substance to be in, on or under the land, or (ii) if it is not possible to find any such person, responsibility will pass to the current owner or occupier of the land, "*Class B*". As such, investigations should be undertaken within a suitable framework, with careful planning for how any findings will be assessed, supported by legal advice and properly considered protocols.

CONCLUSION

Legacy contamination from firefighting foam will potentially be the first substantial front in PFAS litigation in the UK. The sites are defined, the source is known, and the EA is now generating the data. Examples from other jurisdictions serve to illustrate how such claims may be brought: they can survive pleading challenges, take years, and turn on knowledge and attribution. Much of the foam was used lawfully, by operators who will rarely have made provision for the cost of clean-up, and the Committee heard considerable concern about how remediation will be funded. Sites carrying significant but unquantified liabilities may lose value and prove harder to sell: purchasers can be expected to carry out more thorough environmental due diligence, seek specific warranties or indemnities, and insist that liability for historic PFAS stays with the seller. Insurance policies should be reviewed to review the extent to which PFAS risks are covered or excluded, and cover for affected sites is likely to become more expensive. Owners and operators of such sites should investigate and document their position now, while they still control the timing.

If you would like to discuss legal issues concerning PFAS and firefighting foam, please contact clerks@hendersonchambers.co.uk.

© 2026, Toby Riley-Smith KC, Tim Green KC, Lucy McCormick & Douglas Maxwell
This document is not to be used for the development of AI or expert systems without the express consent of its authors

PFAS, Aqueous Film-forming Foam & Contaminated Land:
Litigation Risk & Lessons from other Jurisdictions
Toby Riley-Smith KC, Tim Green KC, Lucy McCormick & Douglas Maxwell

ABOUT THE AUTHORS



Toby Riley-Smith KC

Toby Riley-Smith KC specialises in consumer law, product liability, group litigation, consumer finance, and regulatory crime. He is recommended as a leading silk in these areas by Chambers UK, Legal 500 and/or international directories. He was short-listed for Group Litigation and Consumer Silk of the Year at the Legal 500 Bar Awards 2023.

View Toby's profile here.



Tim Green KC

Tim Green KC has for many years been recognised by the legal directories as an exceptional advocate and highly trusted advisor practising in all areas of product liability and crisis management work. Tim is ranked as Band 1 King's Counsel for environmental work by Chambers UK Bar Guide.

View Tim's profile here.



Lucy McCormick

Lucy is a commercial barrister with a particular emphasis on product liability and property damage. A substantial part of Lucy's practice concerns group actions or other multi-party litigation. In 2025 and 2026, Lucy was shortlisted for the Legal 500's 'Group Litigation Junior of the Year'.

View Lucy's profile here.



Douglas Maxwell

Douglas is a commercial barrister whose practice spans commercial and group litigation, product liability and safety, property, environmental, banking and consumer law, and public law (in particular cases concerning the right to property under Article 1 of Protocol No. 1 to the ECHR ("A1P1"): the subject of his book, The Human Right to Property (Hart Publishing, 2022)). Legal 500 ranks him as a "rising star" at the London Bar. He advises and acts across the full range of property work, with particular expertise where A1P1 is engaged and the crossover between property, planning and environmental law in relation to contaminated land, pollution and forever chemicals.

View Douglas' profile here.

© 2026, Toby Riley-Smith KC, Tim Green KC, Lucy McCormick & Douglas Maxwell
This document is not to be used for the development of AI or expert systems without the express consent of its authors