PFAS FAQ

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1. What are PFAS compounds?

PFAS (per- and polyfluoroalkyl substances) are a group of thousands of long-lasting synthetic compounds used in many industries (including aerospace, automotive, food processing, pharmaceutical, clothing, construction, household products, cookware and firefighting) since the 1950s. PFAS can pass into the soil, water and air during production and use. Further detail on PFAS in Europe can be found in the links below:

- Information on PFAS from European Chemicals Health Agency
- European Legislation related to PFAS

2. How widespread is this issue?

PFAS is a global issue. Because of their widespread use and persistent properties, they have now been found in the environment, humans, animals, food, water and soil in almost every country in the world, not only at airports, fire stations, landfills, pharmaceutical and manufacturing sites, but even the most remote areas on the planet. In Europe, the Le Monde Map of PFAS Contamination identifies 44,500 sites where PFAS contamination has either been detected or is presumed to exist. These sites include landfills, pharmaceutical plants and manufacturing sites in addition to fire stations and airports. The Le Monde Map identifies almost 90 sites in Ireland that could potentially be contaminated with PFAS. EPA research has suggested that the major contributor to PFAS exposure in the Irish population is via the diet and/or less well-studied pathways like dermal uptake from PFAS-containing fabrics and cosmetics.

- Elucidating Human Exposure in Ireland to BFRs and PFASs

3. How might someone be exposed to PFAS?

Because PFAS are so widespread in our environment, exposure to PFAS is possible in many ways. PFAS can be ingested (e.g. through cooking methods, water), inhaled (e.g. if present in dust), and absorbed through the skin (e.g. if present in personal care products or home consumer products). The HSE has noted that for potential health effects related to PFAS, current scientific evidence is not conclusive.

HSE Guidance can be accessed here:

Frequently Asked Questions

4. What legislation is in place to address this issue?

Legislation to control and limit production of PFAS has come into effect within the European Union, and internationally, over the last decade. In August 2025 the European Chemicals Agency (EHCA) published an update to its 2023 proposal to further restrict PFAS use under the EU's chemicals regulation, REACH (Registration, Evaluation, Authorisation and Restriction of Chemicals). The ECHA aims to complete a scientific evaluation of the proposal by the end of 2026.

Differences in regulatory limits and guidance values for PFAS in the environment, i.e. in groundwater, surface water, drinking water and soils, exist between countries. A summary of the legislation as it applies in Ireland is set out below:

- **Surface Water** (surface water refers to any water above ground): There is no legal requirement for organisations to monitor for PFAS in surface water. Under the Water Framework Directive (WFD), local authorities have a responsibility to monitor for PFAS in surface water. THE WFD sets an environmental quality standard (EQS) for surface water in catchment monitoring of an annual average of 0.65 ng/l for one PFAS compound.
- **Groundwater** (groundwater refers to water beneath the surface, in rock and soil pore spaces and fractures): There is no legal requirement for organisations to monitor for PFAS in groundwater, unless specified in their industrial emissions licencing conditions. There is no relevant licencing requirement for Dublin Airport. An EQS for PFAS in groundwater has been proposed at European level however there is currently no regulatory levels in place.
- **Soil / Concrete:** There is no legal requirement for organisations to monitor soil that is in situ for the presence of PFAS. Excavated soil / concrete must be tested to ensure it meets the Waste Acceptance Criteria (WAC) before transferring to an authorised facility. Excavated soils containing PFAS are managed at facilities licenced to accept it.
- **Drinking water:** From January 11, 2026, Irish suppliers of water for human consumption must monitor PFAS under the 2023 Drinking Water Regulations. Two regulatory limits apply: Sum of 20 PFAS compounds: 0.10 µg/L (100 ng/L); PFAS Total: 0.50 µg/L (500 ng/L). The water supplied for consumption at Dublin Airport is supplied by Uisce Éireann.

5. What is the role of the Environmental Protection Agency (EPA) on this issue?

The EPA is the designated Competent Authority in Ireland in relation to the EU Persistent Organic Pollutants (POPs) Regulation. POPs are a group of chemicals, including many PFAS compounds, that remain stable over long periods of time and are harmful to humans and the environment. Under the EPA's Action Plan on POPs included in the POPs National Implementation Plan, several investigations related to PFAS were carried out, including the monitoring of groundwater and surface water for PFAS and examining the risks posed by PFAS.

- PFAS | Environmental Protection Agency

6. What is the role of Fingal County Council (FCC) on this issue?

Local authorities have responsibility for enforcing environmental legislation, including the Local Government (Water Pollution Act (1977)) and conducting any subsequent investigations. Local Authorities are also responsible for the implementation of River Basin Management Plans (under the WFD) at county level. These plans set out the actions to be taken to improve water quality and achieve 'good' ecological status in water bodies (rivers, lakes, estuaries and coastal waters) by 2027.

7. What is the role of the Department of Climate, Energy and Environment on this issue?

The Department of Climate, Energy and the Environment sets the overall policy framework for POPs legislation in Ireland, ensuring alignment with EU and global Stockholm Convention obligations. However, the Environmental Protection Agency (EPA) is the primary body responsible for the day-to-day regulation, implementation, monitoring, and enforcement of POPs legislation, including the National Implementation Plan and the development of strategies to address specific POPs issues within Ireland.

8. What is the role of Uisce Éireann on this issue?

Uisce Éireann will have national responsibility for monitoring for PFAS in drinking water which it supplies from January 2026, under the Drinking Water Regulations.

9. What is the role of the Health Service Executive (HSE) on this issue?

The HSE manages the public health and social care services in Ireland and has a role in addressing threats to public health. The HSE has issued an FAQ in relation to PFAS which is linked below.

- Frequently Asked Questions Per- and poly-fluoroalkyl substances in Drinking Water (hse.ie)
- Interim FAQs - PFAS in Drinking Water

10. What was the source of PFAS on Dublin Airport campus?

The primary source of PFAS at airports was the use of aqueous film-forming foam (AFFF), which was used historically to fight petroleum-based fires at airports. These foams contained fluorinated surfactants that helped the foam spread rapidly over flaming liquids, cooling and extinguishing fires efficiently. The use of these foams was common across Europe. In 2010 (under the Stockholm Convention

on POPs and the EU POPs Regulations) one PFAS compound known as PFOS, was restricted. However, the PFOS free aqueous film forming foam (AFFF) products supplied by manufacturers after this date still contained other PFAS compounds not subject to regulatory restrictions.

11. Do firefighting foams used at Dublin Airport today still contain PFAS compounds?

No. Since 2013, the firefighting foam used by Dublin Airport Fire Service has been an ICAO approved foam classified as fluorine free. Fluorine-free foams do not contain any PFAS compounds.

12. When was it discovered that PFAS was present on the campus at Dublin Airport?

During site investigations carried out at Dublin Airport in 2016, PFAS compounds were found in the soil at a site that previously housed the former firefighting training ground. This was monitored as part of the programme of works at this site. In subsequent years, legislation and awareness of this issue increased. This led to the appointment in 2021, of leading expert consultants to help daa to address PFAS at Dublin Airport. The consultants recommended continued monitoring across the campus to fully establish a conceptual site model of the PFAS in ground and surface water, which is ongoing.

Monitoring reports can be found here: Sustainability at Dublin Airport

13. What were the findings of the latest PFAS monitoring report?

The latest report presents the results of the 2024 monitoring programme of surface water and groundwater at Dublin Airport. Higher concentrations detected in groundwater were in proximity to known contamination source areas on the North Runway and North Apron and the highest levels in surface water were detected to the east of the airport. The highest detections are summarised below.

- **Surface water:** The highest level of PFOS detected in a watercourse during 2024 monitoring was 22.8 ng/L in a sample at the Kealy's Stream. The watercourse with the next highest detected levels was the Sluice at 10 ng/L.
- **Groundwater:** The highest levels of PFAS in groundwater were detected at the site of a former firefighting training ground (maximum sum of 20 PFAS level 2,866 ng/l). On the North Apron the highest levels detected were 1,061 ng/L.

14. Does testing take place outside of the Dublin Airport campus?

Surface water monitoring was completed at 39 locations both within the airport boundary and at downstream locations off-campus within 4 km of the airport. The highest levels of PFOS were detected to the east of the airport in the Kealy's Stream, Sluice and Cuckoo Stream. Tributaries of the Ward River contain low levels of PFOS concentrations. In the Mayne, Ward and Santry waterbodies, greater concentrations of PFOS were detected in downstream monitoring locations than in upstream locations closer to the airport, indicating that the potential for other sources of PFAS to these waterbodies external to the airport.

15. Is the drinking water at Dublin Airport affected?

The drinking water supplied at Dublin Airport is provided by Uisce Éireann and is not taken from groundwater sources or wells at Dublin Airport.

16. What are you doing now?

Work is continuing on the site characterisation, assessment and development of the conceptual site model (CSM) of the campus, in line with EPA guidelines on the management of contaminated land and groundwater. The CSM identifies pollutant linkages (i.e. sources, pathways and receptors of PFAS). We will continue our:

- Ongoing campus monitoring.
- Further engagement with relevant authorities and regulators on this issue.
- Installation of additional groundwater monitoring wells to target known or potential areas of PFAS impact to enhance the conceptual model of groundwater flow through the campus.
- Work to complete a Detailed Quantitative Risk Assessment (DQRA) to further assess the nature and extent of PFAS contamination, identify receptors and guide subsequent phases of work.
- Investigation and implementation of trial measures for affected surface water. We have committed to trialling slip lining in selected drainage runs followed by validation sampling.

Glossary

PFAS: Per- and polyfluoroalkyl substances

PFOS: Perfluorooctane sulfonic acid

ng/l: nanogram per litre

µg/kg: microgram per kilogram

mg/kg: milligram per kilogram

For further information visit:

https://www.dublinairport.com/corporate/corporate-social-responsibility/sustainability