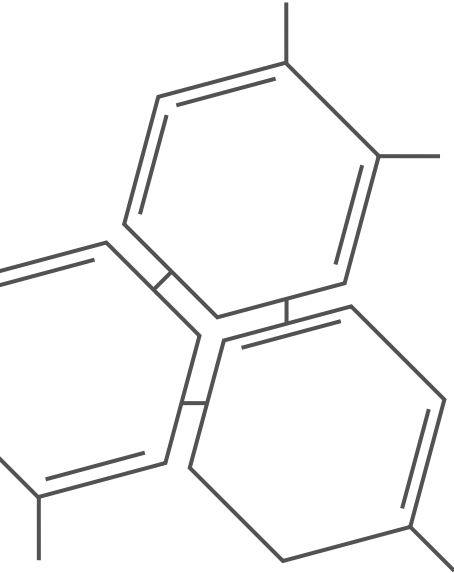


Executive Level PFAS Overview



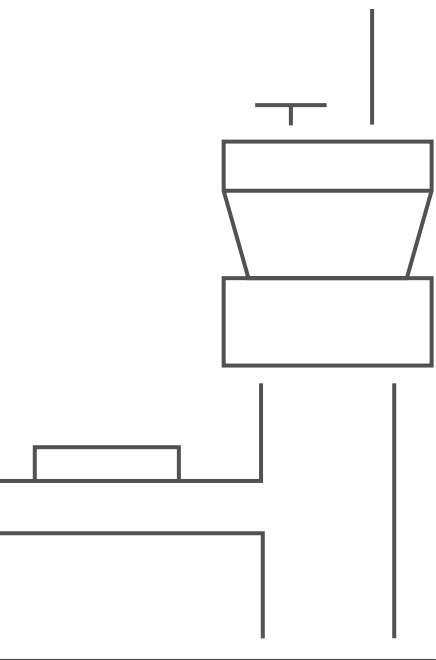
What are PFAS compounds?

- » Per- and Polyfluoroalkyl Substances (**PFAS**) are a group of thousands of man-made chemical compounds that have been used since the 1940s in a wide variety of products, including non-stick cookware, stain-resistant fabric, water-repellent clothing, fast food wrappers, and firefighting foam.
 - » Perfluorooctanoic acid (**PFOA**) and perfluorooctane sulfonate (**PFOS**) are two individual PFAS compounds that have received the most attention, regulation, and concern. However, new research is focused on some other PFAS compounds as well.
- » PFAS compounds are extremely persistent and mostly do not break down over time due to the strength of their carbon-fluorine bond that is one of the strongest bonds in nature.
- » Public and media concern over PFAS is increasing nationally and regionally.
 - » There is growing concern over the potential health effects from certain of these chemicals, primarily through ingestion of PFAS-impacted drinking water.
 - » Due to its widespread use in consumer products, nearly everyone in the world has been exposed to PFAS in some form.



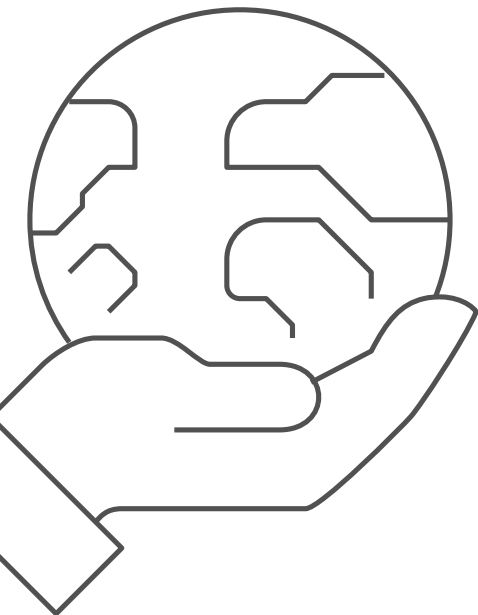
Why are PFAS a concern at airports?

- » The FAA requires Part 139 airports to use Class B firefighting foams that contain PFAS, known as aqueous film-forming foams (**AFFFs**).
- » FAA requires Part 139 airports to use AFFF because it extinguishes petroleum-based fires quickly and effectively.
- » Newer AFFF formulations do not contain intentionally added PFOA or PFOS, but still contain other PFAS compounds that are coming under increased scrutiny. Airports may still have inventory of the older formulations containing PFOA and PFOS.
- » The properties that make PFAS-containing foams excellent for suppressing fire – its ability to smother a fire and be stored for long periods of time – also contribute to environmental concerns because the substances do not readily break down.
- » AFFF PFAS impacts at airports may originate from foam use associated with storage, equipment calibration, timed-response drills, firefighter training, hangar and fuel farm fire suppression systems, accidental releases and/or emergency response.
- » Tenant sites may also have PFAS risks, including (but not limited to) fire suppression systems (hangar systems and fuel farms primarily).
 - » Former Air Force sites are of particular concern due to the historically widespread use of AFFF at those sites.
- » Airports may be located near areas of other current or past industrial activity that have PFAS exposure, such as some manufacturing, landfills, and refineries. AFFF is only one of thousands of manufactured materials that contain PFAS.



What is the FAA doing to address future PFAS exposure?

- » Congress directed FAA to approve a PFAS-free firefighting foam by October 21, 2021. These are generally referred to as a fluorine-free foam (F3). Testing by the FAA is currently underway.
- » Part 139 airports must continue to comply with the FAA mandate to use AFFF until a F3 firefighting foam is approved.
- » FAA has approved equipment certification options and no longer requires AFFF discharges into the environment during timed-response drills, which provides airports with opportunities to eliminate the use of AFFF in non-emergency situations.



What else is being done at the federal and state levels to address PFAS?

- » There is little regulatory guidance from the federal government at this time with regard to acceptable levels and disposal options. States are currently leading on the issue.
- » EPA is working to develop drinking water standards for certain PFAS compounds and also to designate a sub-set of PFAS compounds as hazardous substances.
- » EPA and many states have developed health advisory limits for various PFAS compounds, with extremely low limits.
- » Bills to regulate PFAS have been introduced in Congress but none have been enacted into law.
- » Many states have proposed and/or enacted PFAS-related legislation that may differ significantly from the federal proposals, including attempts to ban AFFF.

What measures are being considered by the airport industry to address PFAS concerns?

- » Techniques to minimize and capture PFAS releases to the environment, such as those listed in ACRP Report 173 “Use and Potential Impacts of AFFF Containing PFASs at Airports.”
- » FAA-approved approaches to testing and training greatly reduce the use of AFFF in non-emergency situations, as referenced above.

How is ACI-NA advocating for the airport industry with regard to PFAS?

- » ACI-NA has established a working group and is engaged with the EPA, DoD, and FAA and Congress regarding PFAS.
- » ACI-NA has developed documents to support airports with understanding and communicating the PFAS issue.
- » ACI-NA has also proposed federal legislation that would:
 1. Require the federal government to take responsibility for PFAS-related remediation and disposal of PFAS-contaminated materials;
 2. Provide funding for takeback of PFAS products and PFAS-contaminated airport equipment as well as for AFFF replacement;
 3. Direct and fund research for attribution of PFAS contamination; and
 4. Protect airports from financial liability for PFAS contamination caused by AFFF use as required by FAA.

