

Ayers Rock (Yulara) Airport and fire fighting foam

Airservices' role at Ayers Rock (Yulara) Airport

Airservices Australia is a government-owned organisation that was established in 1995 to provide air navigation and aviation rescue fire fighting services (ARFFS). Airservices has provided these life-saving rescue and fire fighting services at Ayers Rock Airport since 2004.

Use of fire fighting foam at Ayers Rock (Yulara) Airport

Airservices does not use fire fighting foam containing per- and poly-fluoroalkyl substances (PFAS) at Ayers Rock (Yulara) Airport nor at any other civil airport in Australia.

Airservices began transitioning away from these foams in the early 2000s when concerns first started to emerge about the possible environmental impacts of these chemicals. Airservices has been using PFAS-free fire fighting foam since 2010.

From the early 1980s until the early 2000s, a fire fighting foam called 3M Lightwater was used by various industries around the world. This Aqueous Film Forming Foam (AFFF) was particularly effective for fighting liquid fuel fires and was widely adopted both in Australia and around the world. This product contained perfluorooctane sulfonate (PFOS) as an active ingredient and other PFAS, such as perfluorooctanoic acid (PFOA). In the early 2000s, following concerns that started to emerge about the possible environmental effects of PFAS, Airservices made the decision to change its fire fighting foam to a product called Ansulite which was thought to not contain PFOS. It was later found to contain trace amounts of these chemicals. Since 2010, Airservices has a PFAS-free foam, Solberg RF6 at all civilian airports where it operates, including at Ayers Rock Airport.

What action has Airservices taken at Ayers Rock (Yulara) Airport?

Airservices is taking a proactive and evidenced-based approach to managing PFAS contamination arising from the historical, or legacy-use, of fire fighting foam containing PFAS, at its leasehold sites.

Foam transition and testing

Airservices has stopped using foams containing these chemicals. Airservices has been testing and monitoring for these chemicals, around Australia since 2008. Testing at Airservices-leased areas at Ayers Rock Airport has been ongoing since 2009 and confirmed low levels of these chemicals in soil.

Investigation and characterisation

Airservices engaged independent environmental consultancy GHD Pty Ltd (GHD) to undertake a Preliminary Site Investigation (PSI) and limited sampling program at Ayers Rock Airport. The PSI aimed to better understand potential impacts from Airservices' previous use of PFAS-containing foams. Sampling at Ayers Rock Airport included areas in which Airservices ARFF

services operate, or had operated, such as the Fire Station (FS), fire training ground (FTG) and former interim fire station (FIFS), as well as the Sewage Treatment Plant (STP) discharge area.

Following the PSI, Airservices commissioned a groundwater sample on airport to better characterise the site.

Results

The PSI detected PFAS inside the airport boundary, in close proximity to the leased sites where Airservices carried out its fire service activities prior to 2010, when it transitioned to a PFAS-free foam. The PSI detected PFAS in soil on airport but all soil results were below criteria, indicating soils are a low risk to human health and environmental receptors such as plants and animals. The PSI did not include groundwater sampling but identified a low risk to groundwater. The report noted that groundwater is not extracted for any use near the site.

The PSI is available here.

The targeted on-airport groundwater sampling conducted following the PSI detected a low level of PFAS in groundwater. The groundwater report advised there is no groundwater risk to human health or environmental receptors such as plants and animals.

The Groundwater sampling report is available here.

Next steps

Airservices will continue to engage with Voyages and the NT EPA on PFAS management at the airport including further sampling work and monitoring. Airservices is also researching practical management solutions for legacy PFAS contamination. Various treatment and technology trials are underway at sites nationwide. Airservices will implement successful technologies, where effective, practical and appropriate.

More information

- Airservices Australia Airport-specific information:
 https://www.airservicesaustralia.com/community/environment/pfas/
- For PFAS queries please e-mail the Airservices project team:
 pfascomms@airservicesaustralia.com
- Commonwealth Department of Health Per and Poly-fluroalkyl substances (PFAS)
 http://www.health.gov.au/internet/main/publishing.nsf/Content/ohp-pfas.htm
- The Commonwealth PFAS website: https://www.pfas.gov.au/
- NT EPA PFAS Investigation: https://ntepa.nt.gov.au/your-environment/pfas