

Gold Coast Airport and fire fighting foam

Airservices role at Gold Coast Airport

Airservices is a government-owned organisation providing air traffic control and aviation rescue fire fighting services (ARFFS) at Gold Coast Airport.

An ARFFS has been provided at the Gold Coast Airport since the 1950s.

Use of fire fighting foam at Gold Coast Airport

Airservices does not use fire fighting foam containing per- and poly-fluoroalkyl substances (PFAS) at Gold Coast Airport and stopped using fire fighting foam containing PFAS in 2010.

From the early 1980s until the early 2000s, a fire fighting foam called 3M Lightwater was used. This product contained perfluorooctane sulfonate (PFOS) as an active ingredient and other PFAS, such as perfluorooctanoic acid (PFOA). This Aqueous Film Forming Foam (AFFF) had superior fire knockdown capability, was particularly effective for fire fighting operations and was used by fire services around the world, including Airservices.

Following increasing concerns about the possible environmental and health effects of PFOS, in 2003 Airservices changed to another fire fighting foam called Ansulite that met safety performance criteria and was approved for use by the Civil Aviation Safety Authority. Ansulite was understood not to contain PFOS or PFOA but was later found to contain trace amounts of both these chemicals. In 2010, Airservices transitioned to a PFAS-free foam, Solberg RF6, at Gold Coast Airport.

What action has Airservices taken at Gold Coast Airport?

In September 2017, Airservices engaged GHD Pty Ltd to undertake a targeted PFAS investigation at the eastern side of Gold Coast Airport. This included the sampling of spear bores at properties adjacent to the Airport and sampling from Coolangatta Creek to better understand any potential off-airport impacts.

Key results:

- The GHD report noted low and acceptable risk associated with the use of groundwater for recreational use and irrigation at locations sampled.
- All groundwater samples taken from spear bores at residential properties to the east of the Airport reported PFAS levels below the Commonwealth Department of Health recreational water quality values based on the final tolerable daily intake levels for Australia.
- Six of the 18 samples reported PFAS levels above the Commonwealth Department of Health drinking water quality values. The remaining 12 samples were all below the drinking water quality values.
- All Coolangatta Creek samples outside airport boundaries reported concentrations below Commonwealth Department of Health recreational water guidelines.

Analysis of all samples from the residential properties and from Coolangatta Creek outside the airport boundary returned low results. Queensland Department of Environment and Heritage Protection has advised that residents are reminded that bore water in urban environments can carry any number of contaminants and should not be used for recreation or consumption unless it has been tested and known to be completely safe.

In 2016, sampling was conducted on migration pathways at the airport boundary, with biota sampling subsequently completed in 2017 in the Cobaki Broadwater, adjacent to the Airport boundary. The investigations showed:

- PFAS levels within the airport boundary were below the criteria indicated by Commonwealth Department of Health and enHealth to be protective of human health
- testing in the Cobaki Broadwater detected no PFAS in fish samples or generally in samples for water, sediments and pore-water.

In 2008, Airservices undertook a preliminary assessment of the Fire Training Ground at the Airport and found that levels of PFAS in soil were below acceptable thresholds for residential areas. Sediment levels were also found to be within reporting thresholds.

Next steps

The results do not indicate a need to conduct urgent or immediate further testing however, Airservices will be undertaking a more comprehensive, methodical and wider investigation including potential testing on-airport to determine potential migration pathways and off-site testing to further determine the extent of PFAS impacts.

We will be doing this in consultation with the airport regulator, the Department of Infrastructure and Regional Development, and the Queensland Department of Environment and Heritage Protection.

Airservices will continue to keep the community informed.

If you have any health concerns related to PFAS, advice should be sought from [Queensland Health](#) on 13HEALTH (13 43 25 84).

More information

Airservices Australia: <https://www.airservicesaustralia.com/community/environment/pfas/>

Queensland Department of Environment and Science: <https://environment.des.qld.gov.au/>

Department of Health: <http://www.health.gov.au/internet/main/publishing.nsf/Content/health-pubhlth-publicat-environ.htm>

Gold Coast Airport: <https://www.goldcoastairport.com.au>