

Mackay Airport and fire fighting foam

Airservices role at Mackay Airport

Airservices is a government-owned organisation providing air traffic control and aviation rescue fire fighting services (ARFFS) across Australia, including at Mackay Airport.

A specialised ARFFS presence has been at the airport since 1964, provided by Airservices and its predecessors.

International civil aviation regulations adopted by Australia require Airservices to use fire fighting foam to meet operational requirements for ARFF services.

Use of fire fighting foam at Mackay Airport

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

The primary function of Airservices aviation rescue fire fighting service is to save lives and international fire fighting regulations require the use of fire fighting foam.

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).

Following increasing concerns about the possible environmental and health impacts of PFOS, in 2003 Airservices changed to another approved fire fighting foam called Ansulite that was understood to not contain PFOS or PFOA. It was later found to contain trace amounts of both these chemicals. In 2010, Airservices transitioned to a PFAS-free foam, Solberg RF6, at Mackay.

About per- and poly-fluoroalkyl substances (PFAS)

PFAS are a group of manufactured chemical compounds that are used in a wide range of products including common household products such as non-stick cookware, food packaging and stain-resistant textiles.

Studies have shown that almost everyone has PFAS in their blood. People are potentially exposed to PFAS in the air, dust, food, water and various consumer products.

Australian health authorities cannot currently advise whether PFAS causes health problems in humans but state the potential for adverse health effects cannot be excluded. For more information, see guidance materials from the Australian Health Protection Principle Committee available from the [Commonwealth Department of Health website](#).

PFAS are also used in some fire fighting foams—specifically aqueous film-forming foam (AFFF) like 3M Lightwater and Ansulite—which have the ability to spread over the surface of hydrocarbon-based liquids. AFFF is still used for fire suppression in many industries, including petrochemical and aviation, and some public fire services.

Airservices continues to contribute to work being conducted by Commonwealth and State government agencies looking at developing risk-based screening criteria for PFAS to ensure a nationally-consistent approach is taken by all jurisdictions.

What action has Airservices taken at Mackay Airport?

With the co-operation of Mackay Airport management, Airservices undertook a preliminary site investigation at the fire training ground between 2008 which confirmed the presence of PFAS residues within soil, sediment and groundwater.

On completion of this preliminary work, Airservices informed the relevant Commonwealth and State regulators in 2009, including Queensland Department of Environment and Heritage Protection and the Commonwealth Department of Infrastructure and Regional Development, of the presence of PFAS at the fire training ground.

Airservices continues to monitor PFAS at the airport and work with the Commonwealth and State health and environment departments, regulators, policy experts, airport operators and researchers to develop solutions, such as screening thresholds, to manage PFAS contamination from all sources, including legacy fire fighting foams.

Next steps

Given the widespread use of PFAS in industry and in consumer goods, there are potentially multiple sources of the substances entering the environment. It is therefore not just an airport or fire fighting foam-related problem.

However, Airservices will continue to work with Commonwealth and State regulators to address and responsibly manage PFAS concerns at Mackay Airport and is sharing all investigation results as they become available.

We are committed to providing information on progress to the community and key stakeholders, while working with environmental and health experts to protect the health and safety of our employees and the community.

More information

Airservices: <http://www.airservicesaustralia.com/environment/national-pfas-management-program/>

Queensland Department of Environment and Heritage Protection released an [Environmental Management of Fire Fighting Foam Policy](#) in 2016. Website information: www.ehp.qld.gov.au/

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

Mackay Airport: <http://www.mackayairport.com.au/>