Orange Airport: PFAS investigations

Update for local residents

Key points

- Orange City Council have investigated the presence of per- and poly-fluoroalkyl substances (PFAS) stemming from fire-fighting activities at Orange Airport.
- Investigations have detected low levels of PFAS both on- and off-site.
- The findings of a risk assessment conclude that residents surrounding Orange Airport do not need to take any additional precautions to limit their exposure to PFAS.

What are PFAS?

The release of PFAS (per- and poly-fluoroalkyl substances) into the environment is an emerging global concern. PFAS are a group of manufactured chemicals that include perfluorooctane sulfonate (PFOS), perfluorooctanoic acid (PFOA) and perfluorohexane sulfonate (PFHxS).

Due to their fire retardant, waterproofing and stain resistant qualities, these chemicals were widely used in some types of fire-fighting foams and other industrial products worldwide. PFAS can also be found in low concentrations in many consumer products like food packaging, non-stick cookware, fabric, furniture and carpet stain protection applications, clothing and shampoo.

The most common and prevalent sources of PFAS in the environment is where fire-fighting foams were used for training purposes, particularly on Department of Defence bases and at fire-fighting training facilities.

Products containing PFAS are being phased out around the world.

Are PFAS a health risk?

PFAS are very stable chemicals that bioaccumulate, do not easily break down and can persist in the environment for a long time.

The Australian Government's PFAS Expert Health Panel recommends limiting exposure to PFAS as a precaution until further research into health effects is completed.

Expert advice released by the Australian Government in June 2019 states PFAS has not been shown to cause disease in humans and "probably has minimal impact on human health''.

However, the advice cautions that PFAS exposure may be associated with mildly elevated cholesterol levels, effects on some hormone levels and on kidney function [1].

Finding PFAS in the environment does not mean there is a human health risk. The NSW Government adopts a precautionary approach to limit people's exposure to PFAS.

Typically, this approach means assessing and minimising human exposure pathways, such as limiting groundwater use or consumption (if used) or seafood consumption where threshold levels of PFAS is present.

Why was PFAS testing undertaken at Orange Airport?

PFAS investigations are being undertaken at locations across NSW, including most airports, where there has been the potential for significant historical use of PFAS-containing fire-fighting foams. These investigations are looking at the extent of the impact of PFAS, and the potential risks to the community.

[1] The 2019 enHealth Guidance Statements and a factsheet providing more information on PFAS and human health effects by the Department of Health is available at: https://www.health.gov.au/internet/main/publishing.nsf/Content/ohp-pfas.htm#enHealth

What were the findings?

Investigations have found PFAS at low levels in the soil, surface water and groundwater both on- and off-site. The detection of PFAS is not unexpected given the potential past use of PFAS-containing fire-fighting foams at the site. PFAS has also been used in many domestic and industrial products and background levels may be present from these other sources.

Do residents need to do anything?

Finding PFAS in the environment does not mean there is a human health risk. It is important to assess if there are exposure pathways through which people might ingest PFAS, such as drinking contaminated groundwater or consuming food products watered with contaminated groundwater.

A risk assessment undertaken for the site concluded that residents surrounding the airport and from the broader area do not need to take any additional precautions to limit their exposure to PFAS stemming from the airport. Regardless of PFAS detections, NSW Health recommends that people do not use groundwater for drinking, cooking and personal hygiene (including cleaning teeth and bathing) without testing and appropriate treatment.

What are the next steps?

As a precaution, Orange City Council will voluntarily conduct ongoing monitoring over a set period to ensure concentrations of PFAS remain stable.

PFAS investigations at Orange Airport have now concluded.

Where can I find more information?

More information on the NSW Government's response to PFAS can be found at **www.epa.nsw.gov.au/pfas.**

If you have any questions or concerns, call the 24/7 NSW Environment Line on **131 555**.

NSW EPA