

HMAS Albatross: PFAS Investigations

The Commonwealth Department of Defence has released the results of a Human Health and Ecological Risk Assessment addendum (HHERA) into PFAS (per- and poly-fluoroalkyl substances) chemical contamination from the HMAS Albatross Base, in Nowra. The results indicate PFAS in soil, groundwater and surface water onsite, and surface water and groundwater offsite.

What are PFAS?

PFAS (per- and poly-fluoroalkyl substances) 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 have been widely used in many industrial and consumer products worldwide. PFAS can be found in food packaging, non-stick cookware, fabric, furniture and carpet stain protection applications, clothing, and some types of fire-fighting foam.

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

Are PFAS a health risk?

PFAS are an emerging contaminant, with international research yet to fully determine any health effects related to exposure.

The Australian Government's PFAS Expert Health Panel has concluded that there is no current evidence that supports a large impact on a person's health as a result of high levels of PFAS exposure. However, the Panel noted that even though the evidence for PFAS exposure and links to health effects is very weak and inconsistent, important health effects for individuals exposed to PFAS cannot be ruled out based on the current evidence.

Much of the research on humans has been done with people who were exposed to relatively high levels of PFAS through their work. Studies on PFAS workers have looked for effects on cholesterol levels, male hormones, heart disease, liver changes and other effects, including cancer. These studies have not consistently shown that PFAS exposure is linked to health problems.

A factsheet providing more information on PFAS and human health is available from the Commonwealth Department of Health website at www.health.gov.au/pfas.

Why did Defence test at Albatross?

The Commonwealth Department of Defence is conducting contaminated site investigations at a number of its sites across Australia where there has been significant historical use of PFAS-containing fire-fighting foams.

These foams were used at HMAS Albatross (Albatross) in fire-fighting training and operations prior to a change in Defence policy in the early 2000s.

What is known so far?

In 2017, Defence released the results of a Detailed Site Investigation (DSI) into PFAS from Albatross. The investigation found elevated levels in soil, groundwater and surface water at the Albatross base. PFAS was also found at levels above recommended health values in some samples of ground water and surface water taken offsite.

In June 2018, Defence released the results of an addendum to their Human Health and Ecological Risk Assessment addendum (HHERA) into PFAS from Albatross. This investigation found PFAS in some fish species in Currumbene Creek. The NSW Government has released precautionary advice to regular consumers of fish from Currumbene Creek to minimise their risk of contact with PFAS.

The detection of PFAS in the area is not unexpected given the past use of PFAS-containing fire-fighting foam at the Albatross site.

What is a DSI?

A DSI involves extensive testing to determine the extent of contamination. Using the data in a DSI, coupled with data in a Human Health and Ecological Risk Assessment, decisions can be made on long-term management options.

Do residents need to do anything?

It is important to note that the presence of PFAS in the environment does not necessarily mean there is a health risk.

PFAS is only absorbed into a person's system through exposure pathways. Exposure pathways include drinking contaminated water or eating contaminated food.

In 2017, the EPA spoke with a small number of landowners to discuss the results, and to identify ways they may minimise contact with PFAS, particularly through water use.

In May 2018, the EPA released precautionary advice for regular consumers of fish caught in Currumbene Creek. This advice can be found in the Department of Primary Industries 'Currumbene Creek fishing and dietary advice' flyer on the EPA website.

The NSW Government has reviewed the results of the HHERA addendum and has advised that they do not need to update the existing precautionary advice.

What are the next steps?

Defence will continue to manage PFAS contamination at HMAS Albatross.

What is the State Government's role?

Although the NSW Government does not regulate Department of Defence sites, they have agreed to conduct investigations in a manner consistent with the EPA's requirements.

The NSW Government is committed to working closely with all stakeholders, including the Department of Defence, to ensure an appropriate, scientific and risk-based approach is adopted throughout the investigation.

The EPA is working with other agencies including Department of Primary Industries, NSW Health, and NSW Food Authority to ensure the investigation is suitable and timely, closely



monitoring results and keeping the community informed.

Where can I find more information?

More information on PFAS can be found at www.epa.nsw.gov.au/pfas.

If you have any questions or concerns, call:

- NSW Environment Line **131 555**
- NSW Department of Defence **1800 856 491**

NSW Environment Protection Authority
Email: info@epa.nsw.gov.au
Website: www.epa.nsw.gov.au
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