



HMAS Albatross

November 2023 – Remediation and monitoring update

Overview

In June 2018, Defence completed investigations to better understand per- and poly-fluoroalkyl substances (PFAS) contamination on and around HMAS Albatross, resulting from historical use of firefighting foams on the base.

This included a detailed investigation of groundwater, surface water and sediment both on and around the base. A human health and ecological risk assessment was also completed.

The investigations found that PFAS is mostly concentrated in areas where firefighting foams were previously used, stored or disposed of. These are commonly referred to as source areas. At HMAS Albatross, the main source areas include the Former Fire Training Area, the Flight Lines and Hangars area and the Sewage Treatment Plant.

Findings from the investigations were used to develop a PFAS Management Area Plan that outlines the proposed remediation and management actions.

Program timeline



What are PFAS?

PFAS are manufactured chemicals that have been used in Australia and globally in many common household products and specialty applications.

Legacy firefighting foams containing PFAS have historically been used worldwide by both civilian and military authorities because they are effective in fighting liquid fuel fires.

The movement of PFAS from source areas into the environment has become a concern because these chemicals can persist in humans, animals and the environment.

Learn more about PFAS

Scan the QR code or visit this link to learn more: defence.gov.au/pfas/



About the PFAS Management Area Plan

The management plan recommends actions to manage and reduce the risks of PFAS exposure for the community living and working at HMAS Albatross and the surrounding areas. This includes reducing the amount of PFAS in the environment and leaving the base.

Read the full plan

The HMAS Albatross PFAS Management Area Plan is available on the Defence website. Access it via the QR code or visit: defence.gov.au/about/locations-property/pfas/pfas-management-sites/hmas-albatross





Additional investigations

Defence conducted a Mass Flux Assessment that tracks how and where PFAS is moving from HMAS Albatross. The assessment found that PFAS mainly moves off base in surface water when it rains, particularly when it rains more than 15 mm in a 24-hour period.

Remediation and management activities

Defence is remediating and managing the known source areas of PFAS contamination at HMAS Albatross. These source areas include the Former Fire Training Area on the western side of the base and the Flight Lines and Hangars area on the eastern side of HMAS Albatross.



Remediation means managing contamination and exposure to reduce risks.

The aim of remediation is to minimise PFAS leaving the base and managing source areas. Over time, this will reduce PFAS on and around HMAS Albatross.

As most PFAS moves through surface water at HMAS Albatross, the remediation activities focus on managing PFAS in the soil to reduce the amount of PFAS moving through rain water runoff.

Planned remediation

Defence's investigations confirmed that the Former Fire Training Area is a key source area of PFAS leaving the base. Defence has completed the technical specifications of remediation works to manage PFAS contamination at the Former Fire Training Area. This will involve installing an engineered capping layer over the contaminated soil to reshape the landscape in order to improve the management of water run-off and create a sustainable barrier. This barrier will reduce the amount of PFAS moving into the surface water through rain water runoff. The capping layer and its surface treatment will be carefully managed and ongoing monitoring will be implemented to ensure its effectiveness over time.

Defence expects these works to commence in 2024.

Ongoing Monitoring Plan

The Ongoing Monitoring Plan is an important part of the HMAS Albatross management plan and sets out periodic sampling of groundwater and surface water. This sampling helps Defence understand any changes to where PFAS has been found, and the levels of contamination in the environment.



Surface water sampling being undertaken off base.

Ongoing monitoring at HMAS Albatross and within the management area occurs every February and August. Every February, 28 groundwater and 13 surface water samples are collected. Each August, 13 surface water samples are collected.

In the long term this sampling helps Defence, regulators and the community understand if actions to reduce PFAS have been effective. It also identifies where more investigation or remediation may need to be undertaken.



The monitoring plan is reviewed regularly and Defence updates the monitoring frequency and/or locations of sampling as required in consultation with the NSW Environment Protection Authority.

2022 Ongoing Monitoring Interpretive Report

The 2022 Ongoing Monitoring Interpretive Report outlines the groundwater and surface water sampling undertaken at multiple locations on and around HMAS Albatross between December 2021 and November 2022 (monitoring period).



Number of samples collect and analysed

Groundwater 	26 samples collected from groundwater monitoring wells
Surface water 	26 samples collected from surface water

What were the results?

The report outlines that the nature and extent of PFAS contamination in the HMAS Albatross management area is generally similar to previous results. Ongoing monitoring will indicate longer term trends in PFAS concentrations.

The Ongoing Monitoring Interpretive Report found:

- Groundwater levels were generally higher than historical observations during the monitoring period due to above average rainfall experienced across the region during the monitoring period.
- Concentrations of PFAS in groundwater were generally consistent with historical results, with the exception of new maximum concentrations reported in four monitoring locations on the eastern side of the base.
- New maximum concentrations of PFAS in groundwater is likely due to the movement of PFAS as a result of above average rainfall during the monitoring period
- There were no new first time detections or new maximums of PFAS in off base groundwater and surface water.
- Concentrations of PFAS in surface water were generally within historical ranges in locations sampled.

The findings suggest no change in any potential exposure risks for the community.

Further monitoring

Defence will continue monitoring every six months at the locations identified in the monitoring plan and will complete another review of monitoring results as part of future reports for the management area.

The next monitoring is scheduled for February 2024.

Keeping the community updated

Defence will continue to keep the community updated about the management, remediation and ongoing monitoring of PFAS on and around HMAS Albatross.

Next steps

Over the next 12 months, Defence will:

- commence soil remediation works at the Former Fire Training Area
- continue ongoing monitoring, with the next scheduled sampling to occur in February 2024.
- continue keeping the community informed.

Looking for more information?



Scan the QR code below to find out more about Defence's PFAS Investigation and Management program, or visit:

<https://defence.gov.au/pfas/>



Alternatively, you can contact:



1800 333 362



pfas.enquiry@defence.gov.au



Media enquiries

Media enquiries should be directed to the Defence Media Centre on (02) 6217 1999 or via email at media@defence.gov.au



OMP SAMPLE LOCATIONS

- Base Boundary
- Groundwater Sampling Location
- Management Area
- Surface Water Sampling Location

HMAS Albatross Monitoring Locations