

SERVICE COURAGE RESPECT INTEGRITY EXCELLENCE

RAAF Base Richmond

August 2023 - Remediation and monitoring program update

Overview

Defence completed a number of investigations to better understand the nature and extent of per- and polyfluoroalkyl substances (PFAS) resulting from historical use of firefighting foams on and around RAAF Base Richmond.

These investigations included a detailed investigation of groundwater, surface water and soil both on and around the base. A human health and ecological risk assessment were also completed.

This information was used to develop a PFAS Management Area Plan (PMAP) that outlines the proposed remediation and management actions.

Project timeline



PFAS environmental investigations completed

June 2018



PFAS Management Area Plan released August 2019



Development of Remediation Action Plan (RAP) for former fire training ground *April 2020*



Former fire training ground soil remediation works completed August 2021



PFAS Mass Flux Report completed November 2021



Development of base wide RAP *July 2022*



Commence remediation works at remaining source areas 2023 / 2024





RAP Completion Report and sign off by Technical Advisor



Ongoing monitoring to measure changes resulting from remediation

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 the use of legacy firefighting foam 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 PMAP recommends actions to manage and reduce the risks of PFAS exposure for the community living and working at RAAF Base Richmond and the surrounding areas. This includes reducing the amount of PFAS in the environment and leaving the base. The PMAP can be accessed using the QR code shown below.

Read the full PMAP

The RAAF Base Richmond PMAP is available on the Defence website. Access it via the QR code or visit: defence.gov.au/about/locations-property/pfas/pfas-management-sites/raaf-base-richmond



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Remediation and management activities

Defence is remediating the known source areas of PFAS contamination at RAAF Base Richmond.



Remediation means managing contamination and exposure to reduce risks.

The aim of remediation is to minimise PFAS leaving the base by remediating and managing source areas. Over time this will reduce PFAS on and around RAAF Base Richmond.

Below is a summary of completed and ongoing remediation activities at RAAF Base Richmond.

Remediation at RAAF Base Richmond

PFAS source area	Remediation date
Former fire training ground	Soil stablisation remediation completed August 2021.
Taxiway areas near former fire training ground	Remediation planned for early 2024.
Airfield foam cannon testing area	Remediation planned for early 2024.
Current fire station	Remediation planned for early 2024.
Groundwater remediation – northern boundary	Remediation planned for mid to late 2024.



Image: Excavation works at RAAF Base Richmond

Ongoing Monitoring Plan

The Ongoing Monitoring Plan (OMP) is an important part of the RAAF Base Richmond PMAP and sets out periodic sampling of groundwater, surface water, and sediment. This sampling looks at changes in the location of where PFAS is found and changes in levels of PFAS.

In the long term, this 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 OMP is reviewed regularly and Defence will update the monitoring frequency and/or locations of sampling as required in consultation with the NSW Environment Protection Authority.

2023 Ongoing Monitoring Interpretive Report

The 2023 Ongoing Monitoring Interpretive Report reviewed the exposure risks and movement pathways from the 2018 investigation, and analysed samples collected from across the monitoring area. A total of 450 samples were analysed between December 2021 and June 2023.



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What does the 2023 Ongoing Monitoring Interpretive Report tell us?

The results of ongoing monitoring show that:

- no significant change in the risk to human health and the environment was identified
- the nature and extent of PFAS in groundwater, surface water and soil are similar to the 2020 Annual Interpretive Report results
- the highest reported PFAS levels were at the northern base boundary, with localised increases in PFAS identified in groundwater. These increases may be due to higher amounts of rainfall. Remediation of this area is planned for late 2023
- PFAS levels in groundwater were reported above the historic levels to the north of base, between the Sewage Treatment Plant and Bakers Lagoon
- PFAS concentrations in surface water and soils varied between sampling events, with some new detects and new maximum concentrations
- the higher than average rainfall events experienced during the monitoring period, may have affected the groundwater, resulting in changes in the levels of PFAS detected.

Read the report

The 2023 Ongoing
Monitoring Interpretive
Report is available online.
Access it via the QR code, or visit:

www.defence.gov.au/about/lo cations-property/pfas/pfasmanagement-sites/raaf-baserichmond



Current NSW health guidelines

- The NSW Environment Protection Authority has issued precautionary dietary advice to residents in the area.
- This advice is related to eating homegrown produce which was grown in PFAS contaminated soils, or where contaminated groundwater or surface water from Bakers Lagoon and associated creeks are being used.

Find more information at:

www.epa.nsw.gov.au/yourenvironment/contaminatedland/pfas-investigation-program



Next steps

Over the next 12 months, Defence will:

- begin remediation of 3 additional PFAS source areas using similar methods successfully used at the former fire training ground
- investigate the area of elevated PFAS in groundwater at the northwest boundary
- continue ongoing monitoring, with the next scheduled sampling events in November 2023 and May 2024, and every 6 months after that.

Looking for more information?

Further information on Defence's response to PFAS contamination:

www.defence.gov.au/PFAS



Alternatively, you can contact:



1800 333 362



pfas.enquiry@defence.gov.au

Media enquiries



Direct media enquiries to Defence Media on media@defence.gov.au

2023 PFAS Plume

