

PFAS - Frequently asked questions

For the community

PFAS

What was PFAS used for?

As explained by [SA Health](#), PFAS has been present in a range of industrial, commercial and consumer products since the 1950s, including;

- non-stick cookware
- heat-resistant products
- stain protection products
- food packaging
- firefighting foams.

Does PFAS affect people's health?

As explained by the Federal Department of Health,

“Latest evidence suggests PFAS exposure has been associated with mildly elevated levels of cholesterol, effects on kidney function and effects on the levels of some hormones. However, these effects are small — generally within ranges seen in the general population. PFAS has not been shown to cause disease in humans”.

The Department of Health has revised its information to reflect the most current evidence relating to PFAS.

For further information, please visit the [Department of Health's Fact Sheet](#) and [ENHealth Guidance Statements](#).

Please see *Does PFAS affect people's health* in the [Community information](#) section.

What are normal / acceptable levels of PFAS in human blood?

There are currently no clear guidelines for safe concentrations of either PFOS or PFOA (PFAS) in human blood. This means at this stage, blood test results are not clinically meaningful in terms of measuring any potential health risk as there is little information about any real or potential effects on human beings.

This is an internationally developing issue. The MFS is working with other Australian and international agencies to ensure our practices and work health and safety is of a world standard.

It is important to be aware that everyone in the community would have had some level of exposure through contact with ordinary household items and therefore would have some level of PFAS in their blood. There are a multitude of sources, including scotchgard, Teflon and water proofing.

It is estimated that up to 98 % of the world's population would have PFAS detectable in their blood due to domestic (household) exposure.

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How can I be exposed to PFAS?

The majority of PFAS exposure occurs through ingestion, e.g. of contaminated food and water.

Is treatment available for PFAS?

There is currently no known treatment for human PFAS exposure.

Largs North Fire Station and the surrounding community

I live near Largs North Fire Station, what is the history of the situation?

In December 2018, Largs North Fire Station was identified as possibly having PFAS contamination and therefore testing was undertaken of the station, fire appliance and Gallantry (firefighting boat).

Testing indicated that elevated PFAS levels were present in soil at the rear of the station and in garden produce from the rear of the fire station (fruit, eggs).

The MFS removed the PFAS exposure pathways at Largs North Fire Station and remediated the station.

In January 2019, the MFS enlisted scientific testing company GHD to dig four wells on the grounds of Largs North Fire Station to test groundwater for potential PFAS levels.

The testing found levels in each of the wells to be above the PFAS National Environmental Management Plan (NEMP) Criteria for drinking water and three of the wells were above recreational criteria.

Further testing has found PFAS to extend outside the boundary of Largs North Fire Station.

The MFS arranged for wells to be drilled at eight locations outside the boundary of Largs North Fire Station to determine PFAS levels in groundwater.

The testing of wells that occurred in the residential neighbourhood bordered by Willochra St, Riverina St, Paluma St and Victoria Rd found:

- PFAS Levels in the groundwater in the neighbourhood are above drinking water guidelines specified in the Australian Government Department of Health "Health Based Guidance Values for PFAS". However, PFAS levels in groundwater in this residential area are **significantly lower** than those at Largs North Fire Station. ([Map of results available here.](#))

In 2019, residents living within the above highlighted residential area (bounded by Willochra St, Riverina St, Paluma St and Victoria Rd at Largs North) were advised to cease consuming garden produce as a **precaution. IMPORTANT: This advice to residents has now CHANGED. Please read on.**

What is the latest information regarding testing of residential garden produce at Largs North?

In January 2020, the Metropolitan Fire Service (MFS) tested ripe fruit from gardens at three homes at different locations across the above identified residential area.

Testing of the produce was conducted by environmental consultant GHD on behalf of the Metropolitan Fire Service (MFS) and with the permission of the residents of those three properties.

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What are the results of the early 2020 testing of garden produce in the residential area opposite Largs North Fire Station?

Test results of garden produce from the local residential area **did not find any detectable levels** of PFAS.

The laboratory used by GHD can test to 0.5 microgram per kilogram ($\mu\text{g}/\text{kg}$), and the Australian Food Standard for PFAS in fruit is 0.6 microgram per kilogram ($\mu\text{g}/\text{kg}$). No PFAS reading was detectable in any of the garden produce tested.

In 2019, residents living opposite Largs North Fire Station were previously advised to cease consuming garden produce. What is the latest advice?

This information, updated in February 2020, is relevant to residents in an area of Largs North bordered by Willochra St, Riverina St, Paluma St and Victoria Rd:

SA Health advises that the results from produce testing undertaken by the MFS indicates **that there are no concerns about exposure to PFAS through consumption of garden produce** – in the above specified neighbourhood area of Largs North.

I live in the area. Should I consume garden produce (fruit, vegetables, eggs, bird/animal meat) or use groundwater?

Testing of residential garden produce in the residential area opposite Largs North Fire Station did not find detectable levels of PFAS in ripe garden produce. Therefore, in February 2020, SA Health provided updated advice for local residents regarding garden produce (please see just above this question).

The information provided below is background information specific to Largs North Fire Station and firefighters.

On advice from environmental consultants GHD, all MFS firefighters ceased consumption of garden produce from Largs North Fire Station, such as fruit, vegetables and eggs.

The MFS did not have a bore at the fire station, nor did firefighters water their produce with groundwater. The MFS has found that due to the sandy soil and shallow groundwater, the plant roots took up the groundwater directly, distributing the PFAS from the groundwater into the foliage and produce.

Is groundwater (bore water) safe to consume?

No. SA Health advises that people residing within the boundaries of Willochra St, Riverina St, Paluma St and Victoria Rd at Largs North should not use bore water for any purpose, including human consumption and watering gardens.

If you reside outside of the above mentioned area, please visit the SA Health and EPA websites (see links).

SA Health:

<https://www.sahealth.sa.gov.au/wps/wcm/connect/public+content/sa+health+internet/protecting+public+health/water+quality/bore+water>

SA EPA:

https://www.epa.sa.gov.au/environmental_info/site_contamination/groundwater

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Will my mains (tap) water be safe to drink?

Yes. In the Largs North region, mains (tap) water is not sourced from groundwater.

Scientific testing of mains water at Largs North Fire Station in December 2018 found that PFAS levels were below laboratory detection limits.

In the unlikely event you have elected to modify your home's water supply to use groundwater in replacement of mains water, please follow the advice of SA Health and the EPA regarding ground water.

Links to further information on this issue from both agencies are provided, one question before this one. (See above.)

MFS use of PFAS

When did the MFS use and phase out PFAS?

Historically, the MFS has used Class B Firefighting Foams (for flammable liquids) containing perfluorinated compounds (PFCs). These products include aqueous film forming foam containing PFOS and foam containing PFOA, both having been used on a limited number of fuel fires since the 1970s.

The MFS proactively commenced phasing out the use of PFOS in 2007 and PFOA in 2014 after extensive research, consultation and liaison with both the Australian Fire and Emergency Service Authorities Council (AFAC) and the Environment Protection Authority (EPA).

PFOS and PFOA compound Firefighting Foams were used on rare occasions and only for specific fuel fires and were not routinely used by the MFS.

When did the ban on fluorinated firefighting foams take effect?

In January 2018, South Australia became the first state to ban all fluorinated firefighting foams (not just PFOA and PFOS containing foams). There was a two year change over period in place, to ensure all facilities changed to fluorine free foam by early 2020.

When did the MFS last use firefighting foam containing PFAS?

The MFS proactively commenced phasing out foams containing PFOS in 2007 and PFOA in 2014 after extensive research, consultation and liaison with AFAC and the EPA.

At that point in time, PFAS were not banned for use; the MFS' decision was a proactive one. The EPA implemented a phased ban in 2018.

Does the MFS still use materials or products containing PFAS?

No. The MFS does not store nor use PFAS any longer.

Please see *PFAS use by the MFS* in the [Community information](#) section.