PFAS Drinking Water Report

Broken Hill and Menindee

Sampling Date - 29 October 2024



1 Overview

In consultation with NSW Health, Essential Water has adopted the Food Standards Australia New Zealand (FSANZ) drinking water guidelines for per- and poly-fluoroalkyl substances (PFAS) of:

- less than 0.07 micrograms per litre for perfluorooctane sulfonic acid (PFOS) and perfluorohexane sulfonate (PFHxS); and
- less than 0.56 micrograms per litre for perfluorooctanoic acid (PFOA).

Essential Water samples are tested by an independent laboratory, which uses a nationally accredited (NATA) testing method. The FSANZ guidelines were released by the Australia Government's Chief Medical Officer, Professor Brendan Murphy, following an extensive public health review.

What is PFAS?

Per-and poly-fluoroalkyl substances (PFAS) are a class of artificial chemical substances used in manufacturing and industrial applications. PFAS chemicals have been widely used to make everyday products stain-resistant, waterproof and/or nonstick. For example, PFAS has been used in the manufacture of products that:

- Keep food from sticking to cookware
- Make upholstered furniture, carpets and clothing resistant to soil, stains and water
- Make shoes, clothes and mattresses water resistant
- Keep food packaging from sticking to food
- Help fight fires at airfields and other places where petroleum-product-based fires are a risk.

They are emerging contaminants which Essential Water has tested for throughout their reticulation system.

What is our aim?

Essential Water is committed to providing safe, secure, reliable, and high-quality water to our customers. As confirmed by recent testing, all water currently supplied by Essential Water complies with Australian Drinking Water Guidelines (ADWG) and remains safe to drink.

More information

The following websites contain additional information regarding PFAS and drinking water.

- PFAS and drinking water information and updates | NSW Government
- Draft fact sheet on Per- and poly-fluoroalkyl substances (PFAS) | NHMRC
- <u>Australian Drinking Water Guidelines Public Consultation on Draft Guidance for Per- and Polyfluoroalkyl Substances</u> (PFAS) - NHMRC consultation hub - Citizen Space

2 PFAS Drinking Water Report for Broken Hill as of 29 October 2024

PFAS Chemical Tested	Units*	Existing ADWG Level	Draft Updated Level ADWG	Broken Hill Sample 1	Broken Hill Sample 2	Pass	Fail
PFOA (Perfluorooctanoic Acid)	ng/L	560	200	0.2	0.4	100%	0
PFOS (Perfluorooctanesulfonic Acid)	ng/L	70	4	0.5	0.6	100%	0
PFBS (Perfluorobutanesulfonic Acid)	ng/L	-	1000	<0.5	<0.5	100%	0
PFHxS (Perfluorohexanesulfonic Acid)	ng/L	30	30	0.4	0.5	100%	0

*Nanograms per litre = $ng/L = 1g \times 10^{-9}$

https://ec.europa.eu/health/scientific_committees/opinions_layman/en/phthalates-school-supplies/glossary/mno/mass-units.htm

3 PFAS Drinking Water Report for Menindee as of 29 October 2024

PFAS Chemical Tested	Units*	Existing ADWG Level	Draft Updated Level ADWG	Menindee	Pass	Fail
PFOA (Perfluorooctanoic Acid)	ng/L	560	200	0.1	100%	0
PFOS (Perfluorooctanesulfonic Acid)	ng/L	70	4	0.3	100%	0
PFBS (Perfluorobutanesulfonic Acid)	ng/L	-	1000	<0.5	100%	0
PFHxS (Perfluorohexanesulfonic Acid)	ng/L	30	30	0.7	100%	0

*Nanograms per litre = $ng/L = 1g \times 10^{-9}$

https://ec.europa.eu/health/scientific_committees/opinions_layman/en/phthalates-school-supplies/glossary/mno/mass-units.htm