

Australia: Blue Mountains resident has 10 times safe limit of toxic “forever chemicals”

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23 February 2025

Medical tests undertaken by a resident of the Blue Mountains, west of Sydney, show that both she and her son have dangerously high levels of toxic “forever chemicals” in their blood. The results were made public in her submission to an ongoing Senate Select Committee on per- and poly-fluoroalkyl substances (PFAS).

The un-named resident said that she decided to pay the large testing fee (around \$500 each) after a *Sydney Morning Herald* (SMH) investigation revealed high levels of PFAS in Blue Mountains water catchments. Having lived in the Blue Mountains for 30 years and raised her family there, she was concerned that “Blue Mountains residents have likely been drinking PFAS-contaminated water day-in-day out probably for decades.”

The elevated results, the woman stated in her submission, were at the “red level,” where “adverse health effects can be expected.” She sought the tests in the hope it would explain why she had been “dogged by numerous, ongoing unexplained health issues for many years.”

The blood tests, which are not covered by Medicare and cost individuals around \$500 each, showed cumulative PFOS, PFOA, PFNA, PFHxS and PFDA levels of 20.98 nanogram per millilitre in her blood, more than 10 times what is considered safe by the National Institute of Health (NIH) in the US. PFAS levels in her son’s blood were five times higher than the NIH safe limit. The three major chemicals in firefighting foam, PFOS, PFOA and PFHxS, showed the highest readings.

The main probable source of the contamination of the Blue Mountains water supply was a 1992 petrol tanker crash and explosion on the Great Western Highway at Medlow Bath. Firefighting foam containing PFAS, known as Aqueous Film Forming Foam (AFFF), was used to put out the massive fire, blanketing the road and embankments.

It is well known from numerous site studies and water

testing on and near Australian Defence Force land and airports across Australia, that AFFF settles into soil, leaching into ground and bore water during rain.

Although PFAS in firefighting foam has been phased out for most uses, its legacy persists in substrate and sediment. The chemicals can only be destroyed through incineration at temperatures over 1,000° Celsius (1,800° Fahrenheit), but this produces a toxic by-product that enters the atmosphere.

Between 9,000 and 14,000 different PFAS chemicals are in use in Australia according to a submission to the senate inquiry by Dr Mariann Lloyd-Smith, a senior advisor to the International Pollutants Elimination Network (IPEN).

She warned: “The endocrine impacts of thousands of PFAS in circulation may influence not only our ability to fight disease, but ours and wildlife’s ability to reproduce.”

She continued: “PFAS are endocrine disrupting chemicals and exposure has been linked to increased cholesterol levels, immune suppression, hormonal interference and developmental issues in children. Certain PFAS have shown potential for intergenerational harm.”

In 2023, the International Agency for Research on Cancer (IARC), the cancer agency of the the World Health Organisation (WHO), classified PFOA as carcinogenic to humans and PFOS as possibly carcinogenic to humans after 30 experts from 11 countries studied extensive data from around the world.

Despite the growing body of scientific understanding internationally, Australian health and water authorities are seeking to cover up the dangers posed by PFAS.

A NSW Health spokeswoman told the SMH: “At present, there is insufficient scientific evidence for medical practitioners to be able to tell a person whether their blood level of PFAS will make them sick now or later in life, or to link any current health problems to the

PFAS levels found in their blood. Epidemiological studies would be very unlikely to be able to show any health outcomes that could be attributable to PFAS.”

However, Dr Linda Birnbaum, who headed the US National Institute of Environmental Health Sciences for ten years to 2019, told the SMH this statement was “completely untrue.”

Birnbaum said: “Tens, if not hundreds, of epidemiology studies are showing associations with multiple adverse health effects of PFAS.”

Sydney Water, the state-owned body responsible for drinking water in the NSW capital and its surrounds, claimed in May 2024 that there were “no PFAS hotspots,” but failed to mention that no systematic testing was being conducted.

Only after the SMH article revealed PFAS contamination in Blue Mountains catchments last year did Water NSW, responsible for managing untreated water in catchments and dams, scramble to do their own testing. The results were 140 times higher than mandatory US guidelines.

Following this testing, the Medlow dam was closed and a temporary filtration system installed at the Cascade water treatment plant, using activated carbon and reverse osmosis to reduce the amount of PFAS seeping into the Blue Mountains drinking water supply. The cost of a permanent upgrade of the Cascade plant is estimated to be \$80–100 million.

While these publicly reported tests and mitigations were only taken after a public outcry, it is not because the likelihood of high levels of PFAS in the Australian water supply was unknown.

In 2016, the Australian Environment Protection Authority (EPA) began testing ground and bore water near Australian Defence sites and airports around Australia. Earlier still, in 2000, the US Environmental Protection Agency emailed the Australian government, urging it to stop using PFOS. “[PFOS] appears to combine persistence, bioaccumulation, and toxicity properties to an extraordinary degree,” the agency wrote, according to a *Guardian* journalist who sighted the email.

The Senate inquiry heard evidence of emails exchanged in October last year between the NSW government and water authorities. The emails related to an interview request from the Australian Broadcasting Corporation (ABC), for an official to speak on the revelations of unsafe PFAS levels in the water supply.

A media adviser to the Department of Climate Change, Energy, the Environment and Water allegedly asked,

“whether it would be worth it for the minister or Sydney Water to go on ABC to dispel some myths.”

“In a show of unity, all agencies including Sydney Water declined the interview,” the company’s media manager allegedly replied: “There is no way I will be putting up a rep to speak to be ambushed ... The impact of putting someone [on air] outweighs the benefit as they have their agenda, like the [Sydney Morning Herald].”

Emails between the Water Services Association of Australia (WSAA) and its water utilities members last August also point to the deliberate secrecy surrounding water testing. The SMH reported that the WSAA wrote to its members assuring them that their test results would remain confidential.

WSAA Manager Jason Mingo wrote, “we respect those utilities who are concerned with risks associated with Freedom of Information requests ... To this end, a Deed of Confidentiality will accompany the second [water testing] request and outline the confidential and commercial-in-confidence nature of the data to be shared and how this will be managed.”

The WSAA also conducted focus groups to determine how best to spin the inevitable bad news of PFAS contamination.

In the face of mounting scientific understanding of the adverse health effects of PFAS exposure, the response of governments, water authorities and utility companies is to attempt to conceal and downplay the danger. Despite the weight of compelling evidence presented, the current senate inquiry will also be a whitewash.

This is because remediating PFAS contamination of the water supply would be costly and complex, involving government spending with no immediate return for the authorities, and would cut across the profit interests of corporations worldwide that manufacture and use these chemicals. This is unacceptable under capitalism.

Eliminating PFAS contamination from the environment and water supply requires rational planning and the coordination of vast resources, science and technology. This requires a fight for socialism, to end the subordination of health, lives and the environment to the demands of the wealthy elite for ever-greater profits.



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