

Inquiry into PFAS (per and polyfluoroalkyl substances)

NSW Government submission

December 2024



Acknowledgement of Country

The NSW Government acknowledges the Traditional Custodians of the lands where we work and live. We celebrate the diversity of Aboriginal peoples and their ongoing cultures and connections to the lands and waters of NSW.

We pay our respects to Elders past, present and emerging and acknowledge the Aboriginal and Torres Strait Islander people that contributed to the development of this submission.

Inquiry into PFAS (per and polyfluoroalkyl substances)

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Glossary

Abbreviation	Meaning
ADWG	Australian Drinking Water Guidelines
Cascade WFP	Cascade Water Filtration Plant
DPIRD	Department of Primary Industries and Regional Development
enHealth	Australian Government Department of Health and the National Environmental Health Standing Committee
IARC	International Agency for Research on Cancer
IChEMS	Industrial Chemicals Environmental Management Standard
LWUs	Local water utilities
NHMRC	National Health and Medical Research Council
NSW EPA	NSW Environment Protection Authority
NSW DCCEEW	NSW Department of Climate Change, Energy, the Environment and Water
PFAS	Per and polyfluoroalkyl substances
PFOA	Perfluorooctanoic acid and related substances
PFOS	Perfluorooctanesulfonic acid and related substances
PFHxS	Perfluorohexanesulfonic acid and related substances
PFAS NEMP	PFAS National Environmental Management Plan

1 Executive Summary

The NSW Government recognises the growing community concern around the potential impacts of PFAS (per and polyfluoroalkyl substances) and agrees that this is an issue of concern. The NSW Government is committed to keeping the community informed on any PFAS related issues and updates.

PFAS (per and polyfluoroalkyl substances) are a group of manufactured chemicals that has been widely used in industrial and consumer products since the 1950s and also in some firefighting foams. There are potentially thousands of chemicals in the PFAS family, of which three are currently regulated in Australia. These include perfluorooctane sulfonate (PFOS), perfluorooctanoic acid (PFOA) and perfluorohexane sulfonate (PFHxS). PFAS are very stable chemicals that bioaccumulate and can persist in the environment for many years. Due to the common use of these chemicals people can be exposed to PFAS through food, water, air and skin contact¹ in such items as textiles and leather products, food packaging, coatings and coating additives etc.²

Traces of PFAS chemicals are likely to be found in groundwater, surface water and soils in the environment due to their persistence and widespread everyday use. The NSW Government also knows that historically, PFAS chemicals were common components in some types of firefighting foams so contamination can be found at defence bases, airports and Fire and Rescue NSW and Rural Fire Service training sites and stations.

Since 2016, the NSW Government has taken a precautionary approach to PFAS and its impact on human health and the environment. The NSW Environment Protection Authority (EPA) has led the PFAS Investigation Program through which they have completed 1100 investigations. There are 51 sites identified in NSW with significant PFAS contamination, which remain a high priority requiring further investigation, remediation and/or monitoring. These sites also require ongoing community engagement to report on progress and monitoring results.

We continue to monitor and investigate the impacts of PFAS contamination in the environment and provide precautionary advice to minimise the community's exposure. We are guided by the PFAS National Environmental Management Plan (NEMP) 2.0³, Australian Government Department of Health and the National Environmental Health Standing Committee's (enHealth) advice on PFAS. We are committed to being informed by robust advice in our response to PFAS contamination.

We take an integrated whole of government approach where several agencies work together to investigate and monitor PFAS in the environment. NSW Health is responsible for regulating drinking

¹ <https://www.health.nsw.gov.au/environment/Pages/pfas.aspx#:~:text=PFAS%20was%20developed%20in%20the,care%20products%2C%20and%20cleaning%20products.>

² <https://www.epa.nsw.gov.au/your-environment/contaminated-land/pfas-investigation-program/pfas-investigation-faqs.>

³ <https://www.dcceew.gov.au/environment/protection/publications/pfas-nemp-2.>

water quality under the *Public Health Act 2010*⁴ and the *Public Health Regulation 2022*.⁵ The NSW Department of Climate Change, Energy, the Environment and Water (DCCEEW) regulates the management and monitoring of the State's raw water sources under the *Water Management Act 2000*.⁶ NSW DCCEEW also provide expert technical advice and scientific input on contaminants (i.e. PFAS) in the environment to ensure a risk-based approach is applied to keep NSW safe. The NSW EPA oversees site investigation and assessments. State Owned Water Corporations WaterNSW, Hunter Water and Sydney Water have responsibilities under the *Water NSW Act 2014*⁷, *Hunter Water Act 1991*⁸ and *Sydney Water Act 1994*⁹, respectively, to ensure that declared catchment areas and water management works in such areas are managed and protected so as to promote water quality, the protection of public health and safety, and the protection of the environment.

On 25 September 2024, the NSW Legislative Council established an inquiry into and report on PFAS Contamination in Waterways and Drinking Water Supplies Throughout New South Wales.¹⁰

On Monday 21 October 2024, the National Health and Medical Research Council (NHMRC) released proposed guidelines for public consultation which outline new and lower recommended guideline values of PFAS in our drinking water.¹¹ The NSW Government welcomes the release of the proposed new PFAS drinking water guidelines and is reviewing what the proposed values will mean for monitoring, testing and treatment of drinking water across the state. Importantly, NHMRC has confirmed that our drinking water, as long as it meets existing drinking water guidelines, remains safe to drink.

Sydney drinking water is compliant with the existing drinking water guidelines. In Sydney, only water supplied from the Cascade Water Filtration Plant (Cascade WFP) in the upper Blue Mountains would exceed one of the proposed new PFAS guidelines values (for PFOS), and work is already underway to address this, with Sydney Water and WaterNSW working on short- and longer-term solutions to bring that system into line with the rest of Sydney's water supply. Drinking water supplied by Sydney Water and Hunter Water is regularly monitored to ensure it is within the safe levels outlined in the existing Australian Drinking Water Guidelines (ADWG).¹²

The NSW Government is equally focused on regional NSW and those smaller water supplies that are managed by local water utilities (LWUs), which are mainly local councils. LWUs operate and provide

⁴ <https://legislation.nsw.gov.au/view/html/inforce/current/act-2010-127>.

⁵ <https://legislation.nsw.gov.au/view/html/inforce/current/sl-2022-0502>.

⁶ <https://legislation.nsw.gov.au/view/html/inforce/current/act-2000-092>.

⁷ <https://legislation.nsw.gov.au/view/html/inforce/current/act-2014-074>.

⁸ <https://legislation.nsw.gov.au/view/html/inforce/current/act-1991-053>.

⁹ <https://legislation.nsw.gov.au/view/html/inforce/current/act-1994-088>.

¹⁰ <https://www.parliament.nsw.gov.au/committees/listofcommittees/Pages/committee-details.aspx?pk=329#tab-termsofreference>.

¹¹ <https://www.nsw.gov.au/media-releases/nsw-government-welcomes-nhmrc-proposed-guidelines-on-drinking-water-and-pfas>.

¹² <https://www.nhmrc.gov.au/about-us/publications/australian-drinking-water-guidelines>.

water supply and sewerage services to NSW communities. NSW Health is currently supporting an initial PFAS screening test for all LWUs that have not tested their drinking water this year.

The NSW Government understands the community's concerns about PFAS. Our management of PFAS is informed by the best science and evidence. NSW DCCEEW provides comprehensive technical and operational support to LWUs as they conduct PFAS testing.

The NSW Government recognises that the issue of PFAS and legacy contamination is complex. One submission can never provide all the information. Therefore, the government is happy to provide further information should that be required.

2 PFAS management in NSW

The NSW Government uses an integrated whole of government approach to respond to PFAS contamination and regulatory issues. We are committed to prevent, monitor, investigate and, where appropriate, remediate PFAS contamination to limit its impact on the environment and human health. This section outlines this approach and how we are addressing environmental contamination and potential human health risks. We are guided by the PFAS NEMP 2.0 and enHealth's advice on PFAS. We are committed to being informed by this ongoing advice in our response to PFAS contamination.¹³

2.1 Managing environmental contamination

2.1.1 Prevention, monitoring, investigation and incident management

The NSW regulatory approach aligns with the National PFAS Position Statement¹⁴ which articulates the shared view of Australian states and territories that further release of PFAS into the environment from ongoing use should be prevented where possible and that actions to reduce or phase out the use of PFAS should be nationally consistent. The NSW government has implemented the following to reduce and manage sources of PFAS exposure in NSW.

2.1.1.1 Emergency incident management

The NSW Government has banned and restricted¹⁵ the use of long chain PFAS containing firefighting foam to reduce its impact on the environment, while still allowing its use for preventing or fighting catastrophic fires by relevant authorities and exempt entities.¹⁶ The 'relevant authorities'

¹³ <https://www.health.gov.au/topics/environmental-health/about/environmental-toxins-and-contaminants/pfas>.

¹⁴ <https://federation.gov.au/sites/default/files/about/agreements/appd-national-pfas-position-statement.pdf>.

¹⁵ <https://legislation.nsw.gov.au/view/html/inforce/current/sl-2022-0449>.

¹⁶ <https://www.epa.nsw.gov.au/your-environment/contaminated-land/regulation-of-pfas-firefighting-foams>.

are Transport for NSW, fire brigades, rural fire brigades, community fire brigades and the Port Authority of NSW. The Regulation aligns with the National PFAS Position Statement.

The NSW EPA has developed guidance¹⁷ to assist industry and users of PFAS firefighting foam to comply with the Regulation. The guidance includes information on:

- identifying and testing PFAS firefighting foam
- storage of PFAS firefighting foam
- containment of PFAS firefighting foam discharge
- disposal of PFAS firefighting foam
- decontamination of firefighting foam infrastructure
- the future of PFAS firefighting foam use in NSW.

2.1.1.2 Industrial Chemicals Environmental Management Standard (IChEMS)

In March 2024, the NSW Parliament passed the *Environmental Legislation Amendment (Hazardous Chemicals) Act 2024*.¹⁸ The Act amended the *Protection of the Environment Operations Act 1997* to strengthen the regulation of industrial chemicals and align NSW with new national standards for industrial chemical risk management – the Industrial Chemicals Environmental Management Standard (IChEMS).¹⁹

IChEMS is a national approach to managing industrial chemical use, storage, handling and disposal. Under IChEMS, the Australian Government lists industrial chemicals on the IChEMS register in one of seven schedules according to their environmental risk and assigns risk management measures or other controls to manage these risks if appropriate.

The new law means that national IChEMS scheduling decisions apply in NSW. In December 2023, the Australian Government scheduled the following PFAS chemicals in Schedule 7 of the IChEMS register, the highest risk category:

- perfluorooctanoic acid (PFOA) and related substances
- perfluorooctanesulfonic acid (PFOS) and related substances
- perfluorohexanesulfonic acid (PFHxS) and related substances

The scheduling decision prohibits these PFAS chemicals from import, manufacture, export and use in Australia from 1 July 2025.²⁰ This means that materials containing these products will not be able to be used in Australia or imported into Australia. The IChEMS framework will play an important role in phasing out PFAS in our everyday items to prevent future contamination in our environment.

¹⁷ <https://www.epa.nsw.gov.au/your-environment/contaminated-land/regulation-of-pfas-firefighting-foams/guidance>.

¹⁸ <https://legislation.nsw.gov.au/view/pdf/asmade/act-2024-10>.

¹⁹ <https://www.dcceew.gov.au/environment/protection/chemicals-management/national-standard>.

²⁰ <https://www.epa.nsw.gov.au/your-environment/chemicals/regulating-chemicals-nsw/changes-to-the-regulation-of-industrial-chemicals/industrial-chemicals-environmental-management-standard>.

2.1.1.3 PFAS in packaging

The properties of PFAS, as substances resistant to heat, stains, grease and water, make it useful for a range of applications, including some food contact packaging. When used in compostable packaging, PFAS poses specific challenges to organic waste streams, including contamination issues. The NSW EPA advises against fibre-based materials in food organics and green organics kerbside collections.²¹ The NSW Compost Recovery Order does not allow for ‘compostable’ packaging as an input to compost in NSW.²² This is a stronger regulation than other jurisdictions, who allow ‘compostable’ packaging to be placed in the Food Organics and Garden Organics stream.

In 2018, the NSW Government agreed to the *National PFAS Position Statement* and the achievement of the *2025 National Packaging Targets*²³, including the target for 100% of packaging to be reusable, recyclable or compostable and the phase out of problematic and unnecessary single-use plastic packaging by 2025.²⁴ An Action Plan was created to provide guidance on how to test for and report on PFAS in fibre-based food contact packaging and considerations for selecting alternatives.²⁵

At the Environment Ministers Meetings NSW has flagged the need to take rapid action on packaging regulatory reform to reduce unnecessary and problematic packaging, ensure what is used is reusable and recyclable, and make brand owners responsible for safe end-of-life management.

The NSW EPA closed public consultation for the NSW Plastics: The Way Forward discussion paper on 4 November 2024. The discussion paper proposes the development and publishing of a ‘green’ list’ of chemicals that are permitted in plastics and non-plastic food packaging below certain tolerable risk thresholds. It also proposes the development and publishing of a ‘red list’ of chemicals that are proposed to be phased out of plastic and non-plastic food packaging supplied in NSW within specified timeframes. Both proposed items are aiming to reduce harmful chemicals in plastics and microplastics and prevent leaching into the environment.²⁶

2.1.2 PFAS investigation program

Since 2016, the NSW Government has implemented a whole of government approach to investigate legacy PFAS contamination and takes a precautionary approach by identifying potential human exposure to PFAS. The NSW EPA has led the PFAS Investigation Program (‘the Program’) which conducts a systematic assessment and triage of sites identified as having PFAS contamination. The NSW EPA has a duty to examine and respond to information that it receives of actual or possible land contamination. To date, the NSW EPA has completed 1100 investigations under the Program.

²¹ <https://www.epa.nsw.gov.au/your-environment/recycling-and-reuse/household-recycling-overview/fogo-information-for-households>.

²² <https://www.epa.nsw.gov.au/-/media/epa/corporate-site/resources/wastegrants/rro16-compost.pdf>.

²³ <https://www.dcceew.gov.au/environment/protection/waste/packaging/2025-national-packaging-targets>.

²⁴ <https://apco.org.au/news/20Y9e0000001N7EAI>.

²⁵ <https://www.pfas.gov.au/news/australian-packaging-covenant-organisation-apco-action-plan-phase-out-pfas-fibre-based-food-contact-packaging>.

²⁶ <https://yoursay.epa.nsw.gov.au/nsw-plastics-way-forward>.

There are 51 sites identified in NSW with significant PFAS contamination, which remain a high priority requiring continued investigation, remediation and/or monitoring.

The Program provides timely, accurate and concise precautionary advice to the community through the NSW Technical Advisory Group (TAG), comprised of NSW Government agency expertise. The TAG reviews investigation results and delivers tailored and general precautionary advice on actions people can take to reduce their exposure to PFAS. The range of actions include not using contaminated water for domestic purposes and limiting weekly consumption of produce affected by PFAS contaminated water. The NSW DCCEEW Science and Insights Division undertakes the technical risk assessments and calculations for tailored dietary advice for safe levels of consumption that inform the NSW EPA's site investigations and inform the NSW TAG precautionary advice on actions.

The NSW EPA oversees investigations where sites are most likely to be contaminated based on the legacy use and storage of fire-fighting foams containing PFAS. The Program is guided by appendix B of the PFAS NEMP 2.0²⁷ which lists sectors requiring investigation. The Program includes the NSW Rural Fire Service and Fire and Rescue NSW investigative programs and involves continued monitoring of sites and remediation actions where possible. The NSW EPA also works to ensure Australian Government owned sites (including defence bases and airports) are investigated, managed and remediated.

2.1.3 PFAS Expert Panel

The NSW PFAS Expert Panel is established under Part 6 of the *Protection of the Environment Administration Act 1991*²⁸ for the purpose of providing strategic informed advice to the NSW EPA to assist in developing the NSW Government's response to PFAS issues.

The PFAS Expert Panel takes a strategic approach and interfaces with the PFAS National Framework, including the *PFAS Intergovernmental Agreement*²⁹ and the *PFAS NEMP*.³⁰ The Expert Panel is chaired by the NSW Office of the Chief Scientist and Engineer and consists of representatives from the NSW EPA, NSW Health, Department of Primary Industries and Regional Development (DPIRD) including NSW Fisheries, NSW Agriculture and Biosecurity, NSW Food Authority and NSW DCCEEW.

2.1.4 NSW Technical Advisory Group

The NSW TAG supports the PFAS Expert Panel. The TAG is chaired by the NSW EPA and consists of government technical experts from the above agencies who provide operational and technical support with managing PFAS contaminated sites within NSW. The role of TAG includes providing

²⁷ <https://www.dcceew.gov.au/environment/protection/publications/pfas-nemp-2>.

²⁸ <https://legislation.nsw.gov.au/view/whole/html/inforce/current/act-1991-060>.

²⁹ <https://www.pfas.gov.au/news/intergovernmental-agreement-national-framework-responding-pfas-contamination-0>.

³⁰ <https://www.dcceew.gov.au/environment/protection/publications/pfas-nemp-2>.

evidence-based advice (e.g. precautionary dietary advice) and to assess monitoring reports for specific sites where contamination is present.³¹

2.1.5 Community Engagement

The NSW Government aims to provide accurate and timely advice and information to the community on PFAS contamination. This includes informing the population across the state, as well as ensuring all relevant stakeholders are provided with accurate and useful advice.

For example, a specific website has been established at www.nsw.gov.au/pfas. This contains information on the latest guidance on PFAS and drinking water, as well as actions undertaken by NSW Government agencies to ensure that drinking water is safe.

In addition, local authorities, including local councils and water utilities (including Sydney Water, Hunter Water and WaterNSW) where responsible for drinking water, have a role in informing and engaging their communities as to the safety of their drinking water. This can be found on local council and water utilities websites.

WaterNSW, Sydney Water and NSW Health held three drop-in sessions on PFAS for the Blue Mountains community in late September/early October 2024 and continues to communicate with the community.

2.1.6 Remediation

The NSW Government manages PFAS contamination through the Program and can use its regulatory powers if required through the *Protection of the Environment Operations Act 1997* and the *Contaminated Land Management Act 1997*. Where sites are found to be contaminated, further investigations are conducted to determine what management, monitoring and remediation is possible. This is to actively reduce PFAS levels within the environment and reduce the risk of exposure to the community.

The NSW Government welcomes action by the Australian Government to actively remediate airport and defence sites where PFAS contamination is present and affecting adjoining residents and the environment.

2.1.7 PFAS National Environmental Management Plan

The NSW Government supports and participates in the PFAS NEMP which provides nationally agreed guidance and standards on the investigation, assessment, management and remediation of PFAS wastes and contamination in the environment, including prevention of the spread of contamination.³²

³¹ <https://www.chiefscientist.nsw.gov.au/independent-reports/nsw-pfas-expert-panel-including-williamtown-expert-panel>.

³² <https://www.pfas.gov.au/news/national-environmental-management-plan-pfas>.

In September 2022, the draft PFAS NEMP 3.0³³ was released for public consultation. Consultation closed in February 2023. The draft NEMP considers international approaches to groupings of PFAS, environmental data and monitoring, water biosolids consideration, PFAS behaviour in soil, resource recovery and waste impacts and site-specific guidance for remediation. The NSW Government continues to work collaboratively with the Australian Government on progressing the PFAS NEMP 3.0.

2.1.8 International developments

The NSW Government is monitoring international approaches and developments regarding the research that is being conducted into the impacts of PFAS usage on the environment and human health. This includes the United States Environment Protection Agency (US EPA) issuing its first-ever national, legally enforceable drinking water standard to protect communities from exposure to PFAS.³⁴ In April 2024, the US EPA also designated two widely used PFAS (PFOA and PFOS) as hazardous substances under the Comprehensive Environmental Response, Compensation, and Liability Act, also known as Superfund. The US EPA standards are not health-based, instead these values incorporate a cost-benefit approach in their determination. The standards do not take effect until 2029.

The European Commission introduced maximum levels for certain foods (seafood, muscle meat, offal), which are laid out in Regulation (EU) 2022/2388 and came into effect on 1 January 2023.³⁵

2.2 Managing risks to human health

NSW is guided by the PFAS NEMP 2.0 and enHealth's advice on PFAS. We are committed to being informed by the advice in our response to PFAS contamination.

To date, a causative relationship between health effects and PFAS exposure has not been established.³⁶ enHealth acknowledges that PFAS exposure has been associated with various health effects but notes these associations have generally been small. Potential associations between PFAS exposure and increased risk of two uncommon cancers, namely testicular and kidney cancer, have also been reported. The NSW Government notes that the NHMRC has acknowledged the International Agency for Research on Cancer (IARC) evaluation of the carcinogenicity (potential to cause cancer) of PFOA and PFOS and awaits IARC's full evaluation.

Whilst PFAS has not definitively been shown to be a cause of disease in humans, enHealth notes that the science and our understanding of these issues will continue to evolve. As a precaution, enHealth continues to recommend exposure to PFAS be minimised wherever possible. Accordingly, the NSW Government is taking a precautionary approach.

³³ <https://consult.dcceew.gov.au/nemp-pfas>.

³⁴ <https://www.epa.gov/sdwa/and-polyfluoroalkyl-substances-pfas>.

³⁵ <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32022R2388>.

³⁶ https://www.health.gov.au/sites/default/files/2024-02/enhealth-fact-sheet-on-per--and-polyfluoroalkyl-substances-pfas_0.pdf.

2.2.1 Drinking water

NSW Health works with the NHMRC, enHealth and other national committees to develop guides on how to manage PFAS in the environment, and health-based guidance values for PFAS.³⁷

There is a framework in place to support safe drinking water for people in NSW. The *Public Health Act 2010*³⁸ and the *Public Health Regulation 2022*³⁹ requires drinking water suppliers to have and comply with a 'quality assurance program' (or drinking water management system).⁴⁰ The drinking water management systems must address the elements of the *Framework for Management of Drinking Water Quality*⁴¹ contained within the ADWG⁴² relevant to the operations of the supplier. The ADWG guideline values for PFAS are based on the conservative assumption that 10% of an individual's daily intake of PFAS comes from the drinking water supply.

NSW Health recommends that all LWUs in regional NSW undertake initial screening for PFAS. For LWUs that have not tested for PFAS, NSW Health has offered support for testing of a sample of treated drinking water from each supply system. In addition, NSW Health has recommended that LWUs ensure they have assessed the risk to drinking water from PFAS and included this in their drinking water management system.

Sydney Water, Hunter Water and NSW Health have advised that Greater Sydney and the Lower Hunter's drinking water is compliant with existing ADWG and is safe to drink. The NHMRC has also confirmed that our drinking water remains safe to drink while it meets existing drinking water guidelines.

NSW Health recommends all LWUs report drinking water monitoring results to their communities. Sydney Water, Hunter Water and WaterNSW regularly test for PFAS and publish these results on their websites.

The NSW Government welcomes the release of the proposed new PFAS drinking water guidelines. The NHMRC's recent proposal to lower guideline values for PFAS in drinking water across Australia was open for public consultation until 22 November 2024. NSW water authorities, in conjunction with NSW DCCEEW, the NSW EPA, and NSW Health, are also reviewing the impacts of the new draft guidelines on the monitoring, testing and treatment of drinking water across the state.

³⁷ <https://www.health.gov.au/resources/publications/health-based-guidance-values-for-pfas-for-use-in-site-investigations-in-australia>.

³⁸ <https://legislation.nsw.gov.au/view/html/inforce/current/act-2010-127>.

³⁹ <https://legislation.nsw.gov.au/view/html/inforce/current/sl-2022-0502>.

⁴⁰ <https://www.health.nsw.gov.au/environment/water/Pages/nsw-dwms-audit-guideline.aspx>.

⁴¹ <https://www.health.nsw.gov.au/environment/water/Publications/NSW-guidelines-for-drinking-water-management-systems.pdf>.

⁴² <https://www.nhmrc.gov.au/about-us/publications/australian-drinking-water-guidelines>.

2.2.2 Raw water sources

It is important not to conflate the results of PFAS detected in raw water with those detected in drinking water. The ADWG PFAS guideline values only apply to treated water, which is supplied to NSW residents for drinking. The water found in dams and other catchments is untreated water.

WaterNSW supplies untreated water, sometimes described as 'raw water' or 'source water', to Sydney Water and some LWUs around NSW, who then treat and supply the water for consumption. The Fish River Water Supply System near Oberon, where WaterNSW operates a water filtration plant, is an exception.⁴³ Hunter Water manages both raw water sources and treated water supplies. Some LWUs manage their own raw water supply.

In terms of Greater Sydney, consistent with the ADWG, WaterNSW, Sydney Water and NSW Health conduct a joint Catchment to Customer risk assessment process to assess risk to water supply. The Catchment to Customer risk assessment is used to assess the risk from a large number of hazards including PFAS. The joint agencies first assessed the risk of PFAS impacting the supply of treated drinking water within the Greater Sydney Declared Catchment in 2017, to identify sites where the use of PFAS may have occurred. The outcomes of this assessment showed that the risk to Greater Sydney water supply was low.

In late 2018 NSW Health asked Sydney Water to monitor the drinking water at North Richmond noting that there were community concerns. As part of the Catchment to Customer risk assessment process, NSW Health, Sydney Water and WaterNSW have continued to follow developments in PFAS knowledge and monitored the information from NSW EPA investigations.

In April 2024, the US EPA announced the final National Primary Drinking Water Regulation for PFAS which was lower than the current ADWG. In response to emerging information on PFAS and growing customer and community concerns, WaterNSW and Sydney Water proposed to update the Catchment to Customer risk assessment to validate the previous assessment outcomes.

PFAS below the current ADWG (but above the new proposed guidelines) were detected at the Cascade WFP in the Blue Mountains in mid-2024. In response, WaterNSW initiated investigations into the PFAS source or causes in the raw water supplied to the Blue Mountains (including Cascades WFP and Oberon raw water sources). Initial monitoring in August 2024 identified elevated levels in the upmost dam serving the Cascade WFP (Medlow Dam). Medlow Dam and the adjacent Greaves Creek Dam were quickly isolated (removed from supply) as a precaution and to support a more detailed investigation. Oberon dam tests resulted in PFAS levels near or below detection limits.

WaterNSW's current investigations are focused on identifying the source or cause of the PFAS contamination in the Blue Mountains catchment. WaterNSW is carrying out fortnightly testing of the Blue Mountains System, and monthly testing of Greater Sydney storage dams. Information is available on WaterNSW's website.⁴⁴

⁴³ <https://www.watnsw.com.au/water-services/water-quality/pfas/fish-river-scheme>.

⁴⁴ <https://www.watnsw.com.au/water-services/water-quality/pfas/blue-mountains-investigations>.

Approximately 50,500 customers have been transferred from the Cascade WFP to the Orchard Hills systems to maintain the systems water security. There are around 41,400 customers (Leura, Katoomba, Catalina, Blackheath and Mt Victoria) that are currently still being supplied by the Cascade WFP.

Part of the Tomago Sandbeds groundwater source in the Lower Hunter has been affected by contamination from the RAAF Base Williamtown. Hunter Water has embargoed, or isolated, two of Hunter Water's bore stations in the Tomago Sandbeds as a precaution on the advice of NSW PFAS Expert Panel. It is possible that some of these bore stations may be able to supply safe drinking water again in the future if appropriate management strategies can be implemented. The remainder of the Tomago Sandbeds is used by Hunter Water as a backup water source, and the water is tested for contaminants, including PFAS, and treated before it enters the drinking water supply.

2.2.3 Food

No public health and safety issues with PFAS have been identified from the overall dietary exposure for the general Australian population. The NSW Government, through the TAG, continues to take a precautionary approach by providing the community with specific and general dietary advice to reduce their exposure to PFAS, where PFAS contamination has been identified.

Current evidence suggests PFAS levels in the general Australian food supply are very low and regulation of PFAS chemical contaminants in the general food supply is therefore not required.⁴⁵ The Australian Government has developed health-based guidance values, in the form of tolerable daily intake for PFAS, that aim to protect the general community from exposure to PFAS from food, drinking water and recreation.⁴⁶

2.2.4 Work, health and safety and compensation schemes

The NSW Government recognises that some individuals will have had a higher level of exposure to PFAS due to their employment, particularly relating to firefighting. We have responded to this situation to address the consequences of elevated PFAS exposure in these circumstances. This is part of a holistic response to PFAS recognising that some people may be significantly impacted by elevated PFAS exposure.

SafeWork NSW has released guidelines for workers on the use, handling and storage of PFAS containing aqueous film-forming firefighting foams and their contaminants.⁴⁷ This aims to serve as a preventative measure to address risks around the use, handling and storage of PFAS containing aqueous film forming foams.

⁴⁵ https://www.health.gov.au/sites/default/files/2024-02/enhealth-fact-sheet-on-per--and-polyfluoroalkyl-substances-pfas_0.pdf.

⁴⁶ https://www.health.gov.au/sites/default/files/documents/2022/07/health-based-guidance-values-for-pfas-for-use-in-site-investigations-in-australia_0.pdf.

⁴⁷ <https://www.safework.nsw.gov.au/hazards-a-z/hazardous-chemical/working-safety-with-pfas-containing-aqueous-film-forming-firefighting-foams>.

Further, the NSW Government has a workers compensation scheme in place for work-related injuries and diseases. The NSW Government recognises that some workers, such as firefighters, are at an elevated risk of diseases such as cancer due to the nature of their work. The *Workers Compensation Legislation Amendment (Firefighters) Act 2018*⁴⁸ enabled eligible firefighters diagnosed with any of 12 specific primary cancers, and who meet the corresponding minimum qualifying periods of service, to automatically be presumed to have developed the cancer because of their firefighting work or volunteer service.⁴⁹

2.3 Further examination

The NSW Government is currently testing a number of water suppliers across the state for PFAS. As of the time of this submission, testing is still underway across the state.

⁴⁸ <https://legislation.nsw.gov.au/view/pdf/asmade/act-2018-93>.

⁴⁹ <https://www.safework.nsw.gov.au/resource-library/public-administration-and-safety/working-safely-with-pfas-containing-aqueous-film-forming-firefighting-foams-technical-guide>.

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