



24 February 2026

Committee Secretary
Senate Standing Committee on Community Affairs
Inquiry on the Impact of microplastics and other toxics on human health
PO Box 6100
Parliament House
Canberra ACT 2600

Dear Committee Secretary

The National Health and Medical Research Council (NHMRC) welcomes the opportunity to provide a submission to the Senate Select Committee on the impact of microplastics and other toxics on human health.

This submission outlines NHMRC's role in providing evidence-based health advice on environmental contaminants. It also summarises research relating to the impact of microplastics and other chemicals funded by NHMRC. NHMRC's remit and the content of this submission is relevant to multiple elements of the Committee's Terms of Reference, particularly (a) to (d).

About NHMRC

NHMRC is Australia's leading expert body for supporting health and medical research; for developing health advice for the Australian community, health professionals and governments; and for providing advice on ethical behaviour in health care and in the conduct of health and medical research. NHMRC is an independent statutory agency within the Health Portfolio and operates under the *National Health and Medical Research Council Act 1992* (the NHMRC Act). It comprises the Chief Executive Officer (CEO), who is advised and assisted by the Council of NHMRC, Principal Committees and staff within the office of NHMRC (ONHMRC).

Principal Committees assist Council in carrying out its functions, helping to provide an effective governance and advisory structure for NHMRC. In addition to these committees, a number of working committees and reference groups can be formed under section 39 of the NHMRC Act to advise NHMRC on issues that arise from time to time. Appointees to Council and Committees of NHMRC are required to disclose their interests in line with the *Policy on the Disclosure of Interests Requirements for Prospective and Appointed NHMRC Committee Members*. These s39 Committees report to the Council of NHMRC.

NHMRC's Corporate Plan 2025-26 and health priorities for the 2024-2027 triennium

NHMRC's [2025-26 Corporate Plan](#) emphasises NHMRC's core purposes of investment in health and medical research, translation of evidence into policy and practice, and maintaining integrity and trust in research. These functions align with [NHMRC's Health Priorities for 2024–2027](#), particularly its focus on emerging health threats and emergencies, including working with partners towards a One Health research approach to health and our environment.

NHMRC and health advice

The role of NHMRC, as set out in Section 7 of the NHMRC Act, is to inquire into, issue guidelines on, and advise and make recommendations to the Commonwealth and the states and territories on matters relating to the improvement of individual and population health. This includes developing nationally consistent, evidence-based advice that can be applied by jurisdictions throughout Australia in the context of their own administrative and legislative frameworks.

NHMRC has responsibility for a number of environmental health guidelines and other advice. These include:

- [Australian Drinking Water Guidelines](#)

- [Guidelines for Managing Risks in Recreational Water](#)
- [Australian Guidelines for Water Recycling \(Phase 2\): Augmentation of drinking water supplies](#)
- [NHMRC Statement: Evidence on the effects of lead on human health](#).

These NHMRC environmental health guidelines provide nationally consistent standards and advice about environmental contaminants to maintain public health. They can be used to underpin state and territory regulations on environmental health issues, such as for managing drinking water supplies. NHMRC water quality guidelines also contribute to the [National Water Quality Management Strategy](#), an Australian Government initiative in partnership with state and territory governments.

NHMRC environmental health guidelines are developed with the assistance of advisory committees such as the [Water Quality Advisory Committee](#) and the [Recreational Water Quality Advisory Committee](#). NHMRC also works closely with key stakeholders such as the Australian Centre for Disease Control, the Environmental Health Standing Committee (enHealth), industry groups and jurisdictional health departments, which ensures the national applicability of NHMRC advice. Guidelines are updated periodically if they are identified as a priority by NHMRC with advice from stakeholders. Priority sections of the *Australian Drinking Water Guidelines* are updated more frequently through a rolling revision process.

The NHMRC guideline development process has a number of stages that are informed by best practice approaches in guideline development as part of the [NHMRC Standards for Guidelines](#). This includes assessing the strengths and limitations of the evidence used to develop guideline recommendations, including funding sources and potential risk of bias. There are multiple quality checks involved, including drafting by an expert committee, consultation with jurisdictional water experts, consumers, public consultation and expert review.

NHMRC guidance on microplastics, PFAS and other chemicals

NHMRC provides guidance on thresholds of chemical contaminants that can be used for monitoring (e.g. drinking water health-based guideline values) or to trigger further investigations to protect public health (e.g. [blood lead levels](#)). These thresholds are determined through a review of the best available evidence of the health effects, which may include health effects listed in the Committee terms of reference (a) to (d) depending on the chemical.

The [Australian Drinking Water Guidelines](#) provide an authoritative reference for determining the quality of water to be supplied to consumers in all parts of Australia. These guidelines include over 200 chemical fact sheets that outline the health effects for each chemical (where evidence is available). They include health-based guideline values which represent the concentration of a water quality characteristic that, based on present knowledge, do not pose a significant risk to health over a lifetime of consumption. These values are health protective and are derived using conservative assumptions appropriate to the Australian context. Further information, including the available health considerations at the time of review, are provided in the relevant fact sheet or information sheet for each chemical.

In June 2025, NHMRC issued updated advice for PFAS in the Australian Drinking Water Guidelines. For more information on the health effects of PFAS, including the critical health effects identified in studies underpinning NHMRC's health-based guideline values, see the [PFAS fact sheet](#).

While the *Australian Drinking Water Guidelines* specify guideline values for some plasticisers and stabilisers present in plastics, they currently do not include specific guidance or guideline values for microplastics. While no formal activities are currently underway, NHMRC, with advice from its Water Quality Advisory Committee, is considering the issue of microplastics in drinking water as part of the Committee's 2026-2028 work plan. Other emerging contaminants of concern relating to the Committee's terms of reference may be considered in future updates as the scientific understanding of their health impacts evolves.

The [Australian Drinking Water Guidelines](#) and the [Australian Guidelines for Water Recycling](#) include discussion of pharmaceuticals, personal-care products and compounds with potential endocrine disrupting activity, which may be relevant to the Committee's Terms of Reference (d). NHMRC will continue to monitor emerging evidence and consider updating its advice as appropriate.

NHMRC is currently reviewing its [Guidelines for Managing Risks in Recreational Water \(2008\)](#). The draft updated and renamed [Australian Recreational Water Quality Guidelines](#) propose a risk-based screening approach for all chemicals, including PFAS, using default screening values set at 20 times the Australian drinking water guideline value. NHMRC is currently considering public consultation feedback on the draft guidelines with advice from the [Recreational Water Quality Advisory Committee](#). The Committee and the Council of NHMRC must have regard to the submissions from public consultation before finalising and publishing the Guidelines (anticipated late 2026).

NHMRC-funded research on microplastics, PFAS and other chemicals

Over the last 10 years, NHMRC has funded over \$56 million for research that evaluates the health impacts from exposure to endocrine disruptors, PFAS and other chemicals. This includes research that is relevant to the Committee's terms of reference (a) to (d) such as effects of chemical exposure on neurological and reproductive development.

NHMRC has provided \$14.4 million to research projects investigating the health effects of PFAS through a Targeted Call for Research (TCR) and other grant schemes that may be relevant to the Committee's terms of reference (a) to (d). More information about NHMRC's PFAS TCR, including annual progress reports, is available on the [NHMRC PFAS TCR page](#).

Applications are investigator-initiated and therefore based on the expertise and research interests of those applying for funding. NHMRC does not generally determine the subject of research grant applications apart from priority-driven grant opportunities such as TCRs. Grants are awarded based on competitive peer review with the best science and most significant research proposals funded based on the available funding allocation.

In summary, NHMRC's role in developing evidence-based national guidance and supporting high-quality health and medical research contributes to its mission of building a healthy Australia. Consistent with NHMRC's health priorities and Corporate Plan, NHMRC will continue to monitor evidence relating to emerging health threats and environmental health risks relevant to the Committee's inquiry.

I hope this information is of assistance. If you have any questions, please contact the Executive Director, Research Quality and Advice Branch

Yours sincerely

Professor Steve Wesselingh

Chief Executive Officer
National Health and Medical Research Council