Dear Dr McVeigh

Thank you for the opportunity to provide a submission to the PFAS Sub-committee of the Joint Standing Committee on Foreign Affairs, Defence and Trade (JSCFADT).

I would like to provide the Sub-committee with a response outlining the efforts of the National Health and Medical Research Council (NHMRC) to provide human health advice regarding the effects of PFAS from drinking water and recreational water sources. I would also like to update the Committee on research being conducted under the Targeted Call for Research into Per- and Poly-Fluoroalkylated Substances (PFAS).

Health advice

NHMRC has responsibility for a number of public health guidelines including the Australian Drinking Water Guidelines (ADWG, 2011) and the Guidelines for Managing Risks in Recreational Water (2008). NHMRC water guidelines provide nationally consistent standards to maintain public health that underpin state and territory regulations on drinking water and recreational water quality. Both NHMRC water guidelines also contribute to the National Water Quality Management Strategy, managed by the Department of Agriculture, Water and the Environment. The NHMRC water guidelines are developed with the assistance of expert advisory committees such as the Water Quality Advisory Committee and the Recreational Water Quality Advisory Committee. NHMRC also works closely with the Department of Health, the Environmental Health Standing Committee (enHealth) through the Water Quality Expert Reference Panel, industry groups and jurisdictional health departments or water regulators to manage this work, which ensures the national applicability of our advice. Guidelines are approved by NHMRC Council, whose membership includes the Commonwealth and each state and territory Chief Medical/Health Officer.

In June 2017, the Department of Health commissioned NHMRC to develop health-based guideline values for PFAS (including PFOS, PFOA and PFHxS) for drinking water and recreational water. In response to this request, NHMRC and the Water Quality Advisory Committee developed:

- a chemical factsheet and health-based guideline values for PFAS for the ADWG, published on 24 August 2018.
- guidance and health-based guideline values for PFAS in recreational water (including PFOS, PFOA and PFHxS) as an addendum to the Guidelines for Managing Risks in Recreational Water, published on 12 August 2019.

This health advice provides water regulators and suppliers with guidance on the management of PFAS in drinking water supplies and at recreational water sites in Australia. NHMRC consulted with enHealth to develop this guidance. NHMRC also worked with enHealth and NHMRC’s water quality advisory committees to develop a Frequently Asked Questions resource for the NHMRC website.
The guideline values are based on the tolerable daily intakes calculated by Food Standards Australia New Zealand (FSANZ) in the Perfluorinated Chemicals in Food report (2017). NHMRC is aware that the European Food Safety Authority (EFSA) has recently revised its tolerable intakes of two PFAS chemicals (PFAS and PFOA) to which humans are exposed through the food chain as a result of environmental pollution. This revision may have an effect on Australia’s consideration of health-based guideline values, including those developed by NHMRC for water exposure. NHMRC will continue to monitor the outcomes of EFSA’s recent changes and the upcoming review of this work by FSANZ. In addition, as part of the update to the Guidelines for Managing Risks from Recreational Water, the Recreational Water Quality Advisory Committee will review the methodology used to calculate chemical guideline values, including those for PFAS.

Research projects

As well as providing health advice on PFAS exposure from water sources, NHMRC is also funding a number of studies investigating the health effects of exposure to PFAS. NHMRC established a Reference Group of scientific experts and representatives of communities affected by PFAS contamination to provide contextual information on the background, aims and desired outcomes of the research call. The Targeted Call for Research into Per- and Poly-Fluoroalkylated Substances (PFAS) opened on 19 December 2018 and closed on 1 May 2019. Outcomes were announced on 7 December 2019. The aim of the call was to encourage research that will increase the understanding of the acute and long term potential human health effects from exposure to PFAS chemicals and to inform appropriate responses to managing or reducing human exposure to PFAS.

Applications received were peer reviewed by an expert panel, with different membership from the Reference Group and with input from community representatives. Nine research proposals were successful and will investigate:

- Biological effects of PFAS exposure, molecular mechanisms, and biotransformation
- Health outcomes of firefighters and the effect of PFAS on other health conditions
- Exposure pathways, monitoring of exposure (including the use of biomarkers) and assessment of exposure controls.

Successful projects were awarded approximately $11 million in total over five years. No other NHMRC schemes have funded research on PFAS.

NHMRC continues to support the Whole of Government response to the impacts of PFAS exposure. If you have any questions, please contact Alan Singh, Executive Director, Research Translation Branch at

Yours sincerely

Professor Anne Kelso AO
Chief Executive Officer

15 April 2020