LA TROBE UNIVERSITY

Select Committee on PFAS

October 2025

# Inquiry into the extent, regulation and management of PFAS (per and polyfluoroalkyl substances)

**ENQUIRIES**

[redacted]

## A. INTRODUCTION

La Trobe University appreciates the opportunity to respond to this *Inquiry into the extent, regulation and management of PFAS*.

We welcome the breadth of the Inquiry's Terms of Reference and particularly its focus on identifying the challenges associated with conducting and coordinating health and exposure research into PFAS including in respect to First Nations communities.

In this submission, we outline how La Trobe University, through the combined expertise in our **Gabra Biik, Wurruwila Wutja (Clever Country, Clever People)** Indigenous Research Centre led by Professor Julie Andrews, and the **Biomedical and Environmental Sensor Technology (BEST)** Research Centre, led by Dr Saimon Moraes Silva, is uniquely positioned to contribute to this Inquiry and support the Committee's work.

Gabra Biik, Wurruwila Wutja provides a culturally safe space for Indigenous researchers, while ensuring that non-Indigenous researchers and staff are trained in cultural competency to develop meaningful research partnerships with Indigenous communities. Leveraging La Trobe's extensive research networks with a multi-disciplinary approach, the centre contributes to various research areas, including social change and equity, environmental sustainability, and Indigenous health. La Trobe also hosts the Biomedical and Environmental Sensor Technology (BEST) Research Centre which develops next-generation chemical and molecular sensing, from laboratory instruments to portable, point-of-need tools. BEST's work spans analytical chemistry, advanced materials, microfabrication and electronics to deliver field-ready measurement systems that support rapid environmental and public-health decision-making across Australia.

Laboratory-based PFAS analysis is an elaborate time-consuming process. While essential for regulatory decisions, it is not fit-for-purpose for communities including Indigenous communities and incident responders who require immediate, in-field screening to identify PFAS hotspots. This is why we think it is essential to develop Indigenous-led co-design of field-deployable PFAS detection technologies that would enable faster environment and health monitoring.

**Our key recommendation to the Select Committee is for the establishment of a national PFAS Field Screening and Validation Network. Such a network, co-designed with Indigenous communities and integrated with culturally-safe monitoring, would validate and operationalise field-deployable PFAS screening, making it more immediate and accessible to all communities and thus contributing to improved public health outcomes.**

La Trobe looks forward to working with the Select Committee. Further information about the proposals in our submission can be provided upon request.

## B. KEY RECOMMENDATIONS

1. **Establish a national, community-centred network that validates and operationalises field-deployable PFAS screening, integrated with culturally safe community monitoring, direct triggers to accredited lab confirmation and rapid decision pathways aligned to national guidance. This could be funded via a dedicated, competitive funding program (e.g. a targeted Department of Climate Change, Energy, the Environment and Water (DCCEEW) round, Cooperative Research Centre (CRC) approach, or ARC Linkage) requiring Indigenous leadership, co-design and regional deployment.**
    a. **The administering body would require rigorous validation, accredited confirmatory pathways, Indigenous data governance, and public reporting against National Environment Management Plan (NEMP)-aligned metrics.**

   b. **Specific programs would be required to upskill Indigenous researchers to lead the work with the competitive funding rounds.**

2. **In parallel, establish Indigenous-led, co-designed short and long-term monitoring and health support in impacted communities, delivered through Gabra Biik, Wurruwila Wutja and in partnership with local Aboriginal Community Controlled Health Organisations (ACCHOs). This would feature opt-in, regular check-ups; exposure/health registries governed by Indigenous Data Sovereignty; culturally appropriate mental-health supports; and funded follow-up, feedback and referral pathways.**

3. **Establish systems to ensure long-term monitoring of the impact of PFAS:**

   a. **on the environment, including in important species (animal, plants and whole ecosystem) to track the impact on land and waterways. This could be linked to Aboriginal Cultural Land Management Practices; and**

   b. **on environmental resilience including for instance whether it impacts bushfire recovery and/or drought survival.**

## C. FURTHER BACKGROUND ON LA TROBE'S PROPOSAL

### The current gaps

Gold-standard laboratory-based PFAS analysis deploys liquid chromatography-mass spectrometry (LC-MS) or mass spectrometry (MS). This is essential for regulatory decisions, yet it is often slow, logistically demanding, and costly for triage in rural, regional and remote settings. These barriers are largely due to LC-MS/MS necessitating expensive laboratory equipment and specialised technicians to perform the measurements.

However, communities and incident responders need same-day, in-field screening to identify and track hotspots, and improve risk communication, while staying firmly coupled to national guidance (e.g., PFAS NEMP) and accredited confirmatory testing.

Another clear gap is that while some residents who may have been impacted by PFAS exposure have been offered blood tests or enrolled in scientific studies, there is a dearth of ongoing tangible medical and psychosocial support. Anecdotal evidence from Indigenous communities, for instance, indicates that Indigenous communities are worried about the effects of PFAS that may emerge years later (e.g., cancers or developmental issues). Given that causation is difficult to establish, compensation for health impacts has been rare, which compounds distress. It is also for this reason that we recommend funding for long-term health monitoring.

We recommend funding long-term health monitoring programs (regular check-ups; exposure/health registries) delivered through culturally appropriate care and community-controlled health services, with mental health supports acknowledging the trauma of living with contaminated Country.

### The importance of Indigenous-lead research and co-creation

- Legitimacy and trust: Co-design with Traditional Owners and research centres such as Gabra Biik, Wurruwila Wutja in partnership with community-controlled organisations will ensure that the monitoring respects cultural values of waterways and Country and would build community trust in eventual results and recommendations.

- Community-led: Community priorities shape what is measured (e.g. springs, fishing areas, ceremony materials), the method of communication, the frequency of screening and what pathways are available post-results.
- Data sovereignty and ethics: Indigenous governance over data (collection, access, use) ensures self-determination, supports informed choice around biomonitoring, and aligns with Indigenous research principles.

### Community-led health monitoring and support

We recommend a companion stream that funds:

- Opt-in health monitoring (periodic check-ups; exposure/health-outcome registries) delivered through Gabra Biik, Wurruwila Wutja in partnership with Aboriginal Community Controlled Health Organisations (ACCHOs);
- Culturally appropriate mental health and healing services, acknowledging stress, grief and disruption from contamination of Country;
- Clear referral pathways and risk communication led by community leaders in collaboration with researchers.

These measures directly address the Inquiry's focus on health, social and cultural impacts, research challenges, and the adequacy and effectiveness of engagement and support for communities disproportionately affected, including Indigenous.

### Alignment with the Inquiry's Terms of Reference

This plan would help address a number of the Inquiry's Terms of Reference as follows:

- Data collection and exposure pathways: The establishment of a network would add rapid, field-based screening, linked to confirmatory testing, to improve identification of exposure in water, soil and biota.
- Health, social, cultural impacts: The embedding of community-designed monitoring and mental-health supports; recognises cultural water values and impacts on Country.
- Research challenges and gaps: Validates pragmatic methods and builds an evidence-backed pipeline (screening → confirmation) for national consistency.
- Best practice and management:
    - Aligns with national guidance (e.g., NEMP, PFAS National Environmental Management Plan).
    - Produces Standard Operating Procedures (SOPs), training and public reporting for consistent adoption.
- Government engagement and support (Indigenous): Co-design, paid participation, Indigenous data sovereignty, culturally safe delivery.