

**Submission
No 11**

**INQUIRY INTO INQUIRY INTO PFAS CONTAMINATION
IN WATERWAYS AND DRINKING WATER SUPPLIES
THROUGHOUT NEW SOUTH WALES**

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Select Committee on PFAS
NSW Legislative Council
via email: pfas@parliament.nsw.gov.au

SUBMISSION TO THE INQUIRY INTO PFAS CONTAMINATION IN WATERWAYS AND DRINKING WATER SUPPLIES THROUGHOUT NEW SOUTH WALES

MyEco® Group welcomes the opportunity to contribute to the inquiry into PFAS (per and polyfluoroalkyl substances) contamination in NSW.

We note the Terms of Reference specifically request investigation of the sources of exposure to PFAS; the adequacy and effectiveness of NSW's legislative and regulatory framework in mitigating PFAS contamination; and areas for reform, including legislative, regulatory, public health and other policy measures to prevent, control and manage the risks of these 'forever chemicals'.

About MyEco Group

MyEco Group Limited (ASX: MCO), formerly SECOS Group, is a leading developer and manufacturer of sustainable packaging materials. Our headquarters and Global R&D Centre are both based in Australia. We are a partner in the Australian Government funded Solving Plastic Waste Cooperative Research Centre.

MyEco Group's manufacturing is fully integrated from resin production to film production and end user products. We develop bespoke compostable solutions (certified to meet Australian and international standards for home and commercial composability) for a range of applications. MyEco Group holds a strong patent portfolio, with the global trend toward sustainable packaging fuelling the growth of our Australian-based business.

Our mission is to substitute much of the 1.4 million tonnes of mainly soft plastic packaging going to landfill each year, with certified compostable alternatives. This would prevent around 150,000 tonnes of plastic pollution leaking into the environment annually. MyEco Group's focus is on waste management (e.g. kitchen caddy and bin liners), primary packaging of food (e.g. produce bags, cling film and netting), agriculture (e.g. erosion control matting) as well as distribution packaging (e.g. pallet wrap, magazine wrap, mailer bags and supermarket shopping bags).

Paper packaging as a source of PFAS contamination

PFAS are a group of over four thousand chemicals, many of which are very effective at resisting heat, stains, grease and water. Historically, they have been used in a range of applications, including paper-based packaging products.

All Australian governments have agreed that further release of PFAS into the environment from ongoing use should be prevented where practicable, and some work is underway to reduce or phase out the use of PFAS in many applications.

However, no certification scheme or other regulatory mechanism exists to ensure that paper bags and fibre-based packaging used to store and/or transport food and other goods is free from PFAS.

The advantage of certified compostable bioplastics

Alternatives to PFAS for water and grease barriers exist. This includes compostable biopolymers like PLA, PBAT, PBS, or PHA, as well as compostable waxes.

Our certified compostable bioplastics are made with corn starch and are fully biodegradable and compostable. At end-of life, they break down completely into their natural components (carbon dioxide, water and biomass), contributing to the production of nutrient-rich compost and high-quality soil.

The use and application of certified compostable bioplastics in food organics and garden organics waste streams ('FOGO' or the "green bin") is well established and ubiquitous across Australia. Approximately 80% of households involved in FOGO programs across Victoria, New South Wales, Western Australia and South Australia are utilising certified compostable caddy bin liners, which assist householders to conveniently and hygienically capture and transport their organics waste for kerbside collection. These bags play a crucial role in enabling the collection of food scraps, ensuring a consistent supply of high-quality organic material essential for producing high quality compost.

However, the potential applications of bioplastic technology extend far beyond its current uses. As part of its work through the Solving Plastic Waste CRC, MyEco Group is collaborating with university-based researchers to develop a 'second generation' biopolymer. This innovative material will result in a commercially viable, certified compostable bioplastic designed to meet the demands of more complex applications. These include replacing conventional plastics and treated paper products requiring higher barrier properties, such as packaging for food, potting mix, cosmetics, shampoo sachets, dog food, and other advanced packaging solutions – historically, common sources of PFAS.

Replacing conventional plastic in this way would, for example, allow spoiled food within homes or unsold food or other organics in supermarkets, to be composted still wrapped in its certified compostable packaging, rather than being sent to landfill. This would not only ensure the avoidance of PFAS but also eliminate the risk of microplastic contamination, which not only pollutes our ecosystems but are now recognized as a significant threat to human health.

Products certified to meet AS 4736 (Commercial Compostable) and AS 5810 (Home Compostable) are independently verified to be biodegradable plastics suitable for composting and other microbial treatment. Accreditation to this Australian standard requires a product to pass tests for hazardous substances (e.g. heavy metals); contain more than 50% organic materials; achieve 90%+ biodegradation in no more than 180 days in compost; and have no toxic effect of the resulting compost on plants or earthworms. Certification explicitly requires that no organic fluorinated chemicals, including PFAS, are present in the materials or products. This ensures that certified compostable products are entirely free from PFAS, aligning with the highest standards of environmental and human health protection.

Areas for reform and preventing further risk of these 'forever chemicals'

MyEco Group notes the intergovernmental decision of the Environment Ministers' Meeting (EMM) to reform packaging regulations and explore the best way to implement a new national packaging scheme that is fit-for-purpose, to minimise packaging waste and pollution (including PFAS) and enable a circular economy.

MyEco Group believes that this packaging reform should, in priority order, seek to:

1. **Replace** conventional petroleum-based plastics and other products, such as treated paper, that may contain PFAS or microplastics, with certified compostable bioplastic alternatives wherever possible;
2. **Reuse** packaging wherever possible including reusable certified compostable products;

3. **Recycle** petroleum-based plastics at end-of-useful-life (noting this still results in permanent environmental pollution and public health risk, due to microplastics).

Minimising packaging waste and pollution, including the risk of PFAS, heavy metals and microplastics, requires replacement of conventional products (including some paper-based products) and not simply better end-of-useful-life treatments.

A distinction must also be made between products advertised as compostable and products which are certified compostable. Where a product is certified as compostable (e.g. certified to meet AS4736, AS5810, ASTM D6400, or EN13432), it is *ipso facto* devoid of harmful contaminants found in other so-called sustainable packaging solutions (including some paper-based products).

We therefore recommend governments restrict use of the terms “compostable”, “biodegradable” and “oxo-degradable” on products, packaging and any associated advertising, to only those products that are certified as meeting AS 4736 and/or AS 5810.

MyEco Group is available for further direct consultation

We thank you for taking the time to consider this submission. MyEco Group are available to provide further information to the department, or to answer any queries you may have.

Yours sincerely,

Richard Tegoni
Chief Executive Officer
MyEco® Group