



ENVIRONMENT AND CONSERVATION ORGANISATIONS OF NZ INC.

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## **Submission on Proposal to ban the sale and manufacture of plastic microbeads in personal care products in New Zealand**

### **Introduction**

The Environment and Conservation Organisations of NZ Inc (ECO) is the national alliance of about 45 groups with a concern for the environment and conservation. Some of these member bodies are themselves federations or multiple groups. Not all are conservation or environmental groups.

ECO has followed issues of conservation and environmental management and practice, law and policy since its formation in 1971-2 and we have member groups from all around New Zealand. We have an Improved Environmental management and Law Working Group and another on Conservation, Biodiversity and Biosecurity. This submission was prepared by members of these working groups.

### **Key Submission**

ECO supports proposals to ban the manufacture and sale and manufacture of microbeads in personal care products and other products. These include body scrubs, facial cleaners, and toothpastes. We are unaware of any personal care products containing microbeads that could be considered an essential or critical use.

ECO supports a wider definition being used given growing evidence of other sources of microbeads in the marine and freshwater environments. These are a direct and intentional source of microplastics in the marine environment.

Globally countries are taking action to ban microbeads. The US took action last year to pass legislation (**Microbead-Free Waters Act of 2015**) that prohibits selling and distributing

products containing microbeads. This covers microbeads which are any solid plastic particle that is less than 5 millimeters across and is used for the purpose of exfoliating or cleansing, including toothpaste. This measure starts taking effect from 1 July this year.

The Netherlands, Canada and Ireland have also taken action to ban microbeads and similar action is being looked at by other countries in Europe.

ECO supports action being taken in an amendment to the Waste Minimisation Act 2008.

There is clearly conclusive and growing evidence of the need for action on microbeads due to: the non-biodegradable nature of these beads; and when ingested can lead to impacts on marine life; and life higher on the food chain including humans.

A recently published review by IUCN (Boucher and Friot 2017)<sup>1</sup> looked at the source of microplastics in the marine environment.

### **IUCN Review**

*“According to the report, between 15 and 31% of the estimated 9.5 million tonnes of plastic released into the oceans each year could be primary microplastics, almost two-thirds of which come from the washing of synthetic textiles and the abrasion of tyres while driving.”*

*“The global release of primary microplastics into the ocean was estimated at 1.5 million tons per year (Mtons/year). The estimate ranges between 0.8 and 2.5 Mtons/year according to an optimistic or pessimistic scenario. The global figure corresponds to a world equivalent per capita release of 212 grams or the equivalent of one empty conventional plastic grocery bag thrown into the ocean per person/per week worldwide.*

*The overwhelming majority of the losses of primary microplastics (98%) are generated from land-based activities. Only 2% is generated from activities at sea. The largest proportion of these particles stem from the laundering of synthetic textiles and from the abrasion of tyres while driving. Most of the releases to the oceans are occurring from the use of products (49%) or the maintenance of products (28%). The main pathways of these plastics into the ocean are through road runoff (66%), wastewater treatment systems (25%) and wind transfer (7%).”*

The report notes that there are “Two types of microplastics are contaminating the world ocean: primary and secondary microplastics. Different definitions have been used in the literature (Lassen et al, 2015) and we adopted the following as proposed by a Norwegian study (Sundt et al, 2014):

- **Primary microplastics** are plastics directly released into the environment in the form of small particulates. They can be a voluntary addition to products such as scrubbing agents in toiletries and cosmetics (e.g. shower gels). They can also originate from the abrasion of

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<sup>1</sup> Boucher, J. and Friot D. (2017). *Primary Microplastics in the Oceans: A Global Evaluation of Sources*. Gland, Switzerland: IUCN. 43pp.

*large plastic objects during manufacturing, use or maintenance such as the erosion of tyres when driving or of the abrasion of synthetic textiles during washing.*

- **Secondary microplastics** are microplastics originating from the degradation of larger plastic items into smaller plastic fragments once exposed to marine environment. This happens through photodegradation and other weathering processes of mismanaged waste such as discarded plastic bags or from unintentional losses such as fishing nets.”

As the IUCN report notes:

“Classical use of personal care products results in the direct introduction of the plastic particles into wastewater streams from households, hotels, hospitals, and sport facilities including beaches. Microbeads from cosmetics have been observed in field studies in different areas of the world (Driedger et al , 2015).

## **Conclusion**

In conclusion, ECO considers that that microbeads should be banned in all products where they

Regards

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