

## **Public Consultation Document – Microbeads Control**

### **1. Introduction.**

Over recent years, scientists, experts and policy makers have become increasingly concerned about the levels of waste, or marine litter, winding up in our seas and oceans. It can be found in every aspect of the marine environment and ranges in size from large objects such as fishing nets or shipping containers to micro and nano litter particles.

The extent of the marine litter problem and the harm it causes to the environment has yet to be fully established and is subject to ongoing research. However, it is clear that this is an issue that we need to address at the very least on a precautionary basis. Marine litter also causes socio-economic harm, such as affecting tourism and consumer confidence in seafood.

### **2. Proposal.**

With this in mind, the Minister for Housing Planning, Community and Local Government, Mr. Simon Coveney, T.D., proposes to proceed with wide-ranging marine legislation in 2017. This includes a proposed ban on plastic microbeads in some products. These products include cosmetics and body care products or surface cleaners and scouring agents containing plastic microbeads that are generally rinsed off and as a result, can end up passing through our wastewater systems into rivers and ultimately, our seas.

In this regard, the Minister is now launching a public consultation process. The overall objective of this public consultation process is to invite stakeholders to provide feedback in relation to the proposed legislation.

The public consultation will run for 6 weeks from 10 February until 24 March 2017

### **3. Objectives and Interested Stakeholders**

The overall objective of this public consultation process is to invite stakeholders to inform the development of the proposed ban on plastic microbeads in relevant products.

The specific objectives of the consultation are to:

- Inform the public and interested stakeholders of the intention to enact legislation to prohibit the sale, manufacture, import or export of certain cosmetics and other personal care products containing plastic microbeads used to exfoliate or cleanse, as well as some scouring and cleaning agents.
- provide the general public and interested stakeholders with an opportunity to provide input with regard to this proposed measure;
- seek information and views on the economic and technical considerations arising from this proposal;

- seek information and views on the challenges and needs of affected parties including businesses and consumers; and
- Facilitate an informed debate so that the possibility of unintended consequences from such a prohibition is minimised.

Interested stakeholders may include public regulatory entities, scientific and socioeconomic experts, manufacturers, importers, retailers, the cosmetics and personal care industry, business associations, consumers, environmental nongovernmental organisations (eNGOs), and other concerned members of civil society.

#### **4. What are microbeads?**

For the purposes of this consultation, microbeads are synthetic polymer particles that at the time of their manufacture are greater than 0.1 µm (1 nanometre – one billionth of a centimetre) and less than or equal to 5 mm in size. Microbeads are found in a wide range of personal care products<sup>1</sup> including face soaps, body washes, and toothpastes. They do not include natural substances such as small mineral fragments (e.g. pumice) or organic biodegradable materials (e.g. jojoba beads, sugars, fragments of coconut shell etc.) which are often used in products for a similar purpose. They are essentially tiny plastic beads which do not biodegrade and persist for a very long time in the environment.

Wastewater treatment does not filter out all plastic microbeads. They can get discharged into waterways, where due to their buoyancy, they can easily be dispersed widely and carried with currents great distances. As a result, these microplastic particles may enter the marine environment. They can be found in both our oceans and inland waterways where they may be consumed by fish and other aquatic life.

A wide array of safe and biodegradable organic particles or natural mineral alternatives is readily available and is in widespread use. Thus, the impact of a ban on plastic microbeads in certain products by Ireland on industry is minimised by the fact that Industry will need to adapt to similar current Canadian, US bans and proposed bans by the UK, France, the Nordic Countries and India among others.

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<sup>1</sup> Government of Canada – Scientific Summary 2015: Based on information presented in scientific literature considering personal care products, microbeads have been found in scrubs/peelings, shower/bath products, facial cleaners, creams, deodorants, make-up foundations, nail polishes, eye colours, shaving creams, bubble baths, hair colourings, insect repellents, toothpaste, eye shadows, blush powders, hairsprays, liquid makeups, mascaras, baby products, lotions, and sunscreens. Microbeads may also be found in other consumer uses/products including cleaning products and printer toner (Norwegian Environment Agency, 2014). Some products contain substantial quantities of microbeads. For example, Napper and Thompson (2015, in press) quantified microbeads incorporated in personal care products as exfoliants and showed that abundance varied considerably among products (137,000 – 2,800,000 per 150ml bottle). Some products that are used on a daily basis could result in release to household waste water of 94,500 microbead particles per application (Napper & Thompson, 2015 in press).

## **5. Plastics in the Marine Environment.**

Plastic is a particular problem for the marine environment. Due to its buoyancy, it can easily be washed down rivers, blown offshore or collected by the tide from the shore as well as being dumped or lost directly into the seas from ships and fishing boats. It does not biodegrade and persists in the environment for a long time. Through physical processes it can breakdown into secondary microplastic particles and there is evidence that both large plastic items and microplastics are being ingested by marine fauna which may cause harm.

While it is considered that most marine microplastic litter is created through the erosion of larger pieces of plastic, microplastics are also entering the marine environment in other forms such as fibres or lost nurdles (very small pellets of plastic used as raw material in product manufacture). However, a certain amount of marine microplastic litter is caused by plastic microbeads used in cosmetics, cleansing products and detergents entering the marine environment via wastewater discharges into rivers and estuaries. It is likely that microbeads make up a small proportion of the total amount of microplastics entering our Oceans. However, they are still washed in their billions in top wastewater and they are “readymade “ microplastic particles which may resemble the natural foodstuffs of smaller marine creatures and, once they make their way into in rivers or the seas, they are impossible to remove.

The fact that litter is a trans-boundary issue means that no one country can solve the problem on its own. In co-operation with the EU and other North Eastern Atlantic States, Ireland is actively involved, on the international stage, in developing measures to address this issue on the basis of the precautionary principle (see below).

## **6. What is Ireland’s Position on Microbeads?**

Microbeads are a contributor of plastic litter in the environment. The continued use of microbeads will result in increased presence in the environment. Ireland advocates for the banning of microplastic beads used in cosmetics, personal care and detergents across the European Union. Any such ban should be implemented in such a way as to allow industry a reasonable time to adapt and a set timeframe should put in place so this can be achieved. However, it is important that any such proposal should be clearly limited to cosmetics, body washing and personal grooming products, and detergents at this time.

There are legitimate medical and veterinary uses for microplastics in pharmaceuticals, for example, so we need to avoid any unintended consequences of such a ban until suitable alternatives can be found in these specific areas.

## **7. What is Ireland doing in general about marine litter?**

Ireland is involved in a wide range of activities to address marine litter, both nationally and with partners in other Member States and the wider North East Atlantic region. This activity involves projects which monitor and research aspects of the marine litter problem and raise

awareness and change public behaviour. DHPCLG also works with and organisations such as An Taisce and Bord Iascaigh Mhara on programmes to address marine and coastal litter. Ireland also leads out on a number of elements of the OSPAR<sup>2</sup> Regional Action Plan for Marine Litter (2014).

A list of all of these activities is set out the Appendix to this note.

### **The Precautionary Principle**

The precautionary principle is set out in Article 191 of the *Treaty on the Functioning of the European Union (TFEU)*. It sets out a way of managing potential risks if there is the **possibility** that a policy or action might cause harm to the human health, life or the environment and if there is still no full scientific knowledge about the level of harm caused. The principle is that, if there is a possibility of significant harm, the policy or action in question should not be pursued. Once more scientific information becomes available, the situation should be reviewed.

### **8. Next Steps?**

The Minister will also develop proposals for legislation to be published in 2017 which will include:

- (i) providing the legislative basis for a network of Marine Protected Areas (Spatial Protection Measures) as required by the Marine Strategy Framework Directive,
- (ii) making necessary administrative and enforcement amendments to the Dumping at Sea Acts, and
- (iii) the legislative basis for a domestic ban on plastic microbeads in some products that is compliant with EU law.

In addition to the above, the Minister will also continue the on-going work which Ireland undertakes, both domestically and in cooperation with our regional and international partners, to educate, prevent and undertake research into the causes of marine litter, including microplastics.

Finally, the Minister will also continue to actively campaign for an EU wide ban on plastic microbeads and work collaboratively with the European Commission when they commence work on this issue under the plastics strategy.

Many companies and producers have voluntarily substituted environmentally safer natural products for plastic microbeads the Minister is anxious to establish a level playing field in the cosmetic, personal product and detergent markets and is of the view that regulation at a

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<sup>2</sup> The Convention for the Protection of the Marine Environment of the North-East Atlantic or OSPAR Convention is an international Treaty to which Ireland is a signatory. It provides for international cooperation on the environmental protection of the North-East Atlantic. For more information see [www.ospar.org](http://www.ospar.org)

national level is warranted based on the precautionary principle, until a pan-European consensus is adopted.

The Minister is anxious to receive observations and comments from interested parties on the proposal to introduce a legislative ban on certain products with plastic microbead content that may have a detrimental effect on the marine environment.

## **9. How to get involved.**

Interested parties are now invited to forward their comments, observation and views on the proposed prohibition of the manufacture, import, sale and offer for sale of plastic microbead containing cosmetics, personal care products such as exfoliators or cleansers and some scouring/detergent agents.

Comments on the prohibition are invited on, but not limited to the following topics:

- The range of products envisaged
- Possible exemptions
- The consequences of any ban
- The risks and benefits associated with substitute materials
- And relevant research in the public domain

These comments will be taken into consideration prior to the development of a Draft Bill and Regulatory Impact Assessment, which is required by part of the Irish legislative process.

DHPCLG welcomes observations on this consultation document by interested and affected stakeholders.

## **10. Methods of submitting observations.**

The preferred method of receipt of submissions is by completing the relevant on-line survey at: [www.housing.gov.ie/](http://www.housing.gov.ie/)

Alternatively, you may provide comments/observations by emailing [msfd@housing.gov.ie](mailto:msfd@housing.gov.ie).

Submissions will also be accepted by post to:

**Marine Planning and Foreshore Section  
Department of Housing, Planning, Community and Local Government  
Newtown Road  
Wexford  
Y35 AP90.**

## APPENDIX

### Current Direct Measures to Address Marine Litter.

#### Monitoring and Research.

- **Sediment Sampling and Analysis** – With the assistance of the National Parks and Wildlife Service, DHPCLG took sediment samples from around the Irish coast in 2016 (both in intertidal and subtidal zones). These will be analysed for microplastic content to determine prevalence of different types of plastic in sediment. The lessons learned from this programme may be used to inform an ongoing monitoring programme.
- **OSPAR Beach Litter Survey** – DHPCLG undertakes a quarterly beach litter survey at four fixed sampling points around the coast. The results of this survey are uploaded to the OSPAR marine litter database.
- **Seabed Litter Monitoring** – As part of our responsibility for monitoring under the MSFD, DHPCLG work with the Marine Institute to assess the scope and scale of seabed litter. This work is carried out through the ICES International Bottom Trawl Survey.
- **Fulmar Monitoring** – Fulmars have been identified as an indicator species in the North Sea for marine plastic litter in biota as they are known to ingest it in considerable quantities. DHPCLG is funding a pilot research programme in GMIT to examine the carcasses of dead fulmars from around the Irish coast measuring plastics in stomach contents. This study will help to determine whether or not the fulmar is a suitable species for ongoing monitoring of plastics in the marine environment. The study has examined plastics in the stomach contents of other seabirds as well.
- **Experimental Plastics Recycling Research Programme** – DHPCLG supports potentially ground breaking research by UCD into new low-carbon techniques to viably recycle plastics recovered from the marine environment into raw materials and also into higher technology uses of such materials. This project has potential to turn marine plastic litter into a viable and useful commodity in the both here and in the developing world (which is the greatest source of global marine plastic litter).
- **JPI-OCEANS** – Irish researchers are working on three pan-European research projects (JPI-Oceans) relating to marine litter. The Irish element of these projects is being funded through the Marine Institute. DHPCLG sits on the steering group of one of these projects.
- **EPA Research** – Through its Research Programme, the EPA has funded research into microplastics entering riverine environments and sludges from waste water and manufacturing plants. The EPA is also funding research examining potential harm caused to aquatic biota by microplastics.
- **EU Technical Group on Marine Litter** – DHPCLG sit on this group and contribute toward the development of new guidance on monitoring, assessing sources and pathways for marine litter and determining new areas of research.

## **Awareness Raising and Behavioural Change.**

- **eNGO Marine Environmental Programmes** – DHPCLG actively supports the eNGO sector for a number of important national coastal and marine environmental programmes including:
  - Green Schools Marine Litter Module Pilot – An Taisce has developed a module on marine litter for its highly successful and world leading green schools programme. This will raise awareness of the issue of marine litter with primary and secondary pupils involving them in active anti-litter measures. The module may form the a basis for the development of similar environmental educational modules internationally by the Foundation for Environmental Education (FEE);
  - #2Minutebeachclean – this programme, initially developed by NGOs in the UK encourages beach users to spend two minutes cleaning the beach each time they visit. DHPCLG has provided funding for beach cleaning stations with litter pickers and bags to be provided at over 120 coastal locations around the country. This is done with the cooperation and support of Local Authorities.
  - Clean Coasts programme – this programme supports over 500 voluntary groups with thousands of participants to engage in beach cleaning and coastal environmental programmes of specific coastal locations each year. This includes the annual “Big Beach Clean” annually removing several hundred thousand litter items from our coastal amenities.
  - Other supported programmes include – the Blue flags and Green Coasts award, which include litter management elements and the Love Your Coast photography competition.

## **Fishing Industry Measures.**

- Bord Iascaigh Mhara (BIM) is participating in the Fishing for Litter Programme in place in several EU Countries. 62 Irish Fishing boats are currently engaged in to programme which encourages fishermen to retain marine litter brought up in their nets for onshore disposal.
- DHPCLG is exploring the possibility of other programme in this sector with (BIM).

## **OSPAR Regional Action Plan for Marine Litter Actions Ireland is leading.**

- Assess relevant legal instruments and economic incentives in the OSPAR region to reduce use of single use and other disposable plastic items including looking at economic costs and environmental impacts – examples of such incentives would be Ireland’s plastic bag tax and Germany’s plastic bottle deposit return scheme. We intend to conduct a study to identify and assess such incentives around Europe later in 2017. (Ireland, Germany, Netherlands Portugal).
- Investigate and promote with industry best available techniques and best environmental practice to reduce and prevent sewage and storm related waste water carrying microplastics from entering the marine environment – (Ireland, Norway, Sweden)
- Investigate the prevalence and impact of expanded polystyrene (EPS) in the marine environment and engage with industry to make proposals for alternatives – Ireland, Portugal, France and Spain have drawn up an expression of interest for EU INTERREG funding for this project. MaREI and BIM are participating as Irish partners and DHPCLG has

committed to providing matching funding. REPAK is to be invited to join as a partner. The programme will include the development of incentives to reduce the use of EPS in the Irish fishing and aquaculture food industries.

- Mapping marine litter hotspots in the North Atlantic - Spain, Portugal and Ireland have drawn up an expression of interest for EU INTERREG funding for this project. The Marine Institute is the lead Irish partner in this project, with DHPCLG operating in a supporting and oversight role.