

**BRIEFING PAPER** 

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## Microbeads and microplastics in cosmetic and personal care products

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### Summary

#### **Microbeads and microplastics**

Microbeads and other microplastics are used in a variety of cosmetic and personal care products such as scrubs, soaps, lotions and toothpastes. They are added to these products for a number of purposes, such as to make the product more abrasive or for decoration.

These particles of plastic can enter the environment when consumers rinse them down the drain. The plastic can then subsequently be released into rivers and the sea with waste water outflows.

#### The scale of the issue

Microplastic debris in marine environments is growing in volume. It comes from a number of sources, such as the breakdown of larger pieces of plastic over time and industrial scrubbers used to blast-clean surfaces.

Microbeads and other microplastics from cosmetics make up a small proportion of marine microplastic pollution. Studies have calculated that 0.1% to 4.1% of marine microplastic pollution in Europe was from cosmetic product sources. 4.1% equates to between 2,400-8,600 tonnes of plastic entering the marine environment per year.

#### Impacts of microplastics

Microplastics are likely to have environmental impacts. Studies have shown they can be ingested by marine animals leading to physical harm and reproductive or toxic effects.

There is evidence to suggest that microplastics are entering the human food chain. On the basis of current evidence microplastics in seafood are not currently thought to represent a human health risk, although uncertainties remain. The Government has said that the Chief Medical Officer will review their impact on human health.

#### Cosmetic microplastic ban

A number of companies are voluntarily phasing out some types of microplastic in cosmetic products in the EU. The voluntary measures taken by industry could reduce cosmetic microplastic use by almost 50% by 2020.

In the USA a ban on microbeads in cosmetic and personal care products will be phased in over the next few years. There have been calls for a similar ban in the UK and EU to address what is perceived to be an unnecessary source of microplastic pollution. In September 2016, the UK Government committed to banning the manufacture and sale of cosmetics and personal care products containing microbeads in all of the UK by October 2017. In December 2016, the Government published a consultation document, which closes on 28 February 2017.

News of the Government's proposed ban was welcomed by the Marine Conservation Society. However, some in the industry question the proportionality of a ban given the success of voluntary efforts and the relatively small contribution that cosmetic products make to marine pollution. A recent research report commissioned by the European Union recommended that more information be collected to help determine whether a ban is required or whether the industry is responding adequately to the issue.

# 1. What are microbeads and microplastics?

Microbeads are microplastics. Microplastics are small plastic particles.<sup>1</sup>

The term microbead is often used to refer to spherical-shaped microplastics in cosmetic and personal care products. They are used as an abrasive in 'rinse off' products such as facial scrubs, soaps and toothpastes.<sup>2</sup> Such abrasives were originally based on natural materials. They were in some cases replaced by synthetic materials due to the advantages these offer such as consistent particle size, shape and sterility.<sup>3</sup>

The proportion of microplastics varies in different products, from less than 1 per cent to more than 90 per cent of the content. A study conducted by the United Nations Environment Programme (UNEP) found that in a "typical shower gel... there was roughly as much plastic material in the gel itself as in its packaging".<sup>4</sup>

Microplastics are also used in 'leave-on' cosmetic and personal care products such as lotions, sunscreens, make-ups and deodorants.<sup>5</sup> The Cosmetic Toiletry and Perfumery Association indicated that microplastics in 'leave-on' cosmetics would be "a very small proportion... since the main use of such materials is as abrasive and there are few leave-on cosmetics where abrasivity is required".<sup>6</sup>

However, a recent research report indicated that the use of microplastics in some leave-on products might be "ubiquitous", and cautiously estimated that between "3,800 and 7,500 tonnes of microplastic" might be used each year in Europe in these products. The report recommended further research to understand this issue.<sup>7</sup>

#### 1.1 Definitions

A number of different definitions of microbeads and microplastics in cosmetic products have been used.

A major industry association, Cosmetics Europe, uses a definition that relates to rinse-off products:

Plastic microbeads [are] synthetic non-biodegradable solid plastic particles >1  $\mu$  m and < 5mm in size used to exfoliate or cleanse in rinse-off cosmetic products.

<sup>&</sup>lt;sup>1</sup> <u>Microbeads – A Science Summary</u>, Government of Canada, July 2015

<sup>&</sup>lt;sup>2</sup> ibid

<sup>&</sup>lt;sup>3</sup> The Cosmetic Toiletry and Perfumery Association, personal communication, 25 May 2016

<sup>&</sup>lt;sup>4</sup> <u>UN environment agency urges ban of microplastics in cosmetics and personal care</u> <u>products</u>, UN New Centre, 16 June 2015

<sup>&</sup>lt;sup>5</sup> <u>Study to support the development of measures to combat a range of marine litter</u> <u>sources</u>, Eunomia, 29 January 2016

<sup>&</sup>lt;sup>6</sup> The Cosmetic Toiletry and Perfumery Association, personal communication, 25 May 2016

<sup>&</sup>lt;sup>7</sup> Study to support the development of measures to combat a range of marine litter sources, Eunomia, 29 January 2016

A number of different legal definitions of microbeads have been used in the US (where a number of states are introducing bans). Some states have banned all 'solid' plastic particles in all personal care products, whereas other bans only relate to rinse-off products and others permit defined biodegradable plastics to be used.<sup>8</sup>

A research study commissioned by the European Commission recommended that a broad definition covering all microplastics in cosmetic and personal care products be used. It said that a broad definition was needed that did not contain "loopholes" related to:

- There being no definition of biodegradability (biodegradability can vary considerably between plastics);
- The definition only relating to 'rinse-off' products, when microplastics are found in other products designed to be left on, but which ultimately may be rinsed off the skin;

Particle size—it indicated that the definition should extend to all plastic particles under 5mm in size.<sup>9</sup>

<sup>&</sup>lt;sup>8</sup> Study to support the development of measures to combat a range of marine litter sources, Eunomia, 29 January 2016

<sup>&</sup>lt;sup>9</sup> <u>Study to support the development of measures to combat a range of marine litter</u> <u>sources</u>, Eunomia, 29 January 2016

### 2. Concerns

# 2.1 The scale of microbeads and microplastics in the environment

Microbeads and other microplastics from cosmetics can enter the environment when consumers rinse them down the drain along with waste water. The plastics can subsequently be released into rivers and the sea with effluent from wastewater treatment plants.<sup>10</sup>

There are a number of other sources of microplastics in the environment. These include:

- Secondary microplastics created by the breakdown of larger pieces of plastic over time;
- Car tyre wear;
- Industrial scrubbers used to blast clean surfaces;
- Plastic powders used in moulding.<sup>11</sup>

Estimates for the proportion of microplastic pollution from cosmetic and personal care products vary, although their overall contribution is likely to be small. Studies estimate that they may contribute from  $0.1\%^{12}$  to as much as  $4.1\%^{13}$  of microplastic pollution.

If the upper figure (4.1%) is correct, this would equate to roughly 2,400 to 8,600 tonnes of plastic entering the marine environment from Europe every year.<sup>14</sup>

# 2.2 Possible environmental and human health impacts

Microplastics can persist for years in the environment. Microplastics have been recorded at almost every location on the globe, and their concentration in the environment is expected to increase in coming decades.<sup>15</sup>

A United Nations advisory body, the Joint Group of Experts on the Scientific Aspects of Marine Environmental Pollution (GESAMP) reviewed the evidence on microplastics in 2015. It found that research on the potential ecological and human health risks of microplastics was relatively new and that there was "a large degree of uncertainty surrounding this issue".<sup>16</sup>

<sup>&</sup>lt;sup>10</sup> <u>Microbeads – A Science Summary</u>, Government of Canada, July 2015

<sup>&</sup>lt;sup>11</sup> Ibid

<sup>&</sup>lt;sup>12</sup> <u>Microplastics in the aquatic and terrestrial environment: sources (with a specific focus on personal care products), fate and effects</u>, Environmental Sciences Europe, 6 January 2016

<sup>&</sup>lt;sup>13</sup> Study to support the development of measures to combat a range of marine litter sources, Eunomia, 29 January 2016

<sup>&</sup>lt;sup>14</sup> Study to support the development of measures to combat a range of marine litter sources, Eunomia, 29 January 2016

<sup>&</sup>lt;sup>15</sup> Ibid

<sup>&</sup>lt;sup>16</sup> Sources, fate and effects of microplastics in the marine environment: a global assessment, GESAMP, (Kershaw, P. J., ed.). (IMO/FAO/UNESCO-

However, GESAMP found with high confidence that "the ingestion of microplastics may have an effect on the feeding, movement, growth and breeding success of the host organism". It listed the main *potential* impacts of microplastics on marine organisms:

- physical effects (physical obstruction or damage of feeding appendages or digestive tract or other physical harm);
- chemical effects (microplastics can transport chemicals into marine organisms, which may lead to toxicity);
- impaired health;
- impacts on the population of different organisms, and the wider ecosystem;
- dispersal of damaging invasive species and pathogens.

GESAMP noted that microplastics can potentially accumulate in the human food chain. It reported on a study that indicated that "the annual dietary exposure for European shellfish consumers can amount to 11,000 microplastics per year".<sup>17</sup> GESAMP went on that "it is evident that humans are exposed to microplastics through their diet and the presence of microplastics in seafood could pose a threat to food safety".

However, GESAMP stated that our "understanding of the fate and toxicity of microplastics in humans constitutes a major knowledge gap that deserves special attention".<sup>18</sup>

In May 2016 a report published by the United Nations Environment Programme concluded that "from the available limited evidence... microplastics in seafood do not currently represent a human health risk, although many uncertainties remain".<sup>19</sup>

#### 2.3 Sustainable resource use

UNEP noted that plastics used in cosmetic products cannot be collected for recycling.<sup>20</sup> This might be counter to efforts on seeking to introduce more sustainable consumption and production patterns.

IOC/UNIDO/WMO/IAEA/UN/UNEP/UNDP Joint Group of Experts on the Scientific Aspects of Marine Environmental Protection), 2015

<sup>&</sup>lt;sup>17</sup> Ibid

<sup>&</sup>lt;sup>18</sup> Ibid

<sup>&</sup>lt;sup>19</sup> <u>Marine plastic debris and microplastics – Global lessons and research to inspire action and guide policy change</u>, United Nations Environment Programme, 2016
<sup>20</sup> UN environment agency urges hap of microplastics in computies and personal call

<sup>&</sup>lt;sup>20</sup> UN environment agency urges ban of microplastics in cosmetics and personal care products, UN New Centre, 16 June 2015

# 3. Action on microbeads and microplastics

The Government and other governments in the OSPAR region (see below) are currently working to agree a voluntary phase-out of microplastics in cosmetic products.

There have been calls to ban microbeads in the UK and the EU.

#### 3.1 Voluntary action

#### A voluntary phase out by industry

Cosmetics Europe is a trade association for the cosmetics and personal care industry. In October 2015 it said that microbeads account for "a very small fraction of the plastic debris found in the marine environment". However, "in view of the public concerns expressed... and given the availability of alternative materials", it recommended to its membership the discontinuation of microbeads in "wash-off cosmetic and personal care products for exfoliating and cleansing purposes" by 2020.<sup>21</sup>

A number of companies have already or will discontinue the use of microbeads in rinse-off products. These include:

- Colgate-Palmolive phased out in 2014
- Unilever phased out in 2015
- Boots phased out in 2015
- L'Oréal total group phase out by 2017<sup>22</sup>

Campaign group *Beat the Micro Bead* provided details of the companies that have committed to phasing out microbead use in cosmetics <u>here</u>.

The Cosmetic Toiletry and Perfumery Association said that a survey was being conducted in order to gather data on the impact of the voluntary action, but that usage may have "already fallen by over 50%".<sup>23</sup>

A research study commissioned by the European Commission indicated that the voluntary measures taken by industry could reduce microplastic use in all cosmetic and personal care products (including leave-on products) by almost 50% by 2020. The report also found that it was not currently clear the extent to which microplastics in non-rinse-off products were a problem.<sup>24</sup>

<sup>&</sup>lt;sup>21</sup> Cosmetics Europe issues a recommendation on solid plastic particles (plastic micro particles), Cosmetics Europe, 21 October 2015

<sup>&</sup>lt;sup>22</sup> <u>Companies that have pledged to stop using microbeads</u>, Beat the Micro Bead, viewed 22 February 2016

<sup>&</sup>lt;sup>23</sup> The Cosmetic Toiletry and Perfumery Association, personal communication, 25 May 2016

<sup>&</sup>lt;sup>24</sup> Study to support the development of measures to combat a range of marine litter sources, Eunomia, 29 January 2016

The European Commission said in August 2015 that it was "examining the effectiveness of existing efforts to reduce microplastics in cosmetics and other possible measures to address this problem".<sup>25</sup>

#### **UK Government**

The Government said:

- It had conducted research into the issue, which had highlighted the possible environmental risks of microplastics;<sup>26</sup>
- That it would put a monitoring programme into place, and that "once the extent of the problem is better understood we will be able to assess the need for any additional measures";<sup>27</sup>
- It wished to address the issue through the development of a common EU position on microplastics; <sup>28</sup>
- That it supported a voluntary phase-out of microplastic use in personal care and cosmetic products.<sup>29</sup>

The Government has said that if it "cannot get a common position out of the EU, we are open to the possibility of the United Kingdom acting unilaterally" on the issue. It said it would explore a ban on the use of microbeads in cosmetics "particularly if the voluntary approach is deemed inadequate".<sup>30 31</sup>

#### OSPAR

The UK is a signatory to the OSPAR Convention. OSPAR is the international mechanism by which governments in the region and the EU cooperate to protect the marine environment of the North-East Atlantic.

The 2014 OSPAR Regional Action Plan on marine litter contained an action for the voluntary phase out of microbeads. The Plan said that if a voluntary agreement proved "not to be sufficient", OSPAR would prepare a proposal to "call on the EU to introduce appropriate measures to achieve a 100% phasing out of microplastics in personal care and cosmetic products".<sup>32</sup>

The Plan also contained actions to:

• Investigate and promote "sustainable and cost-effective solutions" to reduce and prevent microplastics from sewage and storm water entering the environment;

<sup>&</sup>lt;sup>25</sup> European Parliament PQ E-010067-15 [Micro-plastics and the circular economy],19 June 2015

<sup>&</sup>lt;sup>26</sup> Marine Strategy Part Three: UK programme of measures, HM Government, December 2015

<sup>&</sup>lt;sup>27</sup> Ibid

<sup>&</sup>lt;sup>28</sup> <u>Marine Strategy Part Three: UK programme of measures - Summary of responses</u>, Department for the Environment, Food and Rural Affairs, December 2015

<sup>&</sup>lt;sup>29</sup> Ibid

<sup>&</sup>lt;sup>30</sup> HC Deb 5 May 2016 c303

<sup>&</sup>lt;sup>31</sup> Written evidence submitted by Defra to the Environmental Audit Committee inquiry into the environmental impacts of microplastics, 26 April 2016

Regional Action Plan for Prevention and Management of Marine Litter in the North-East Atlantic, OSPAR, 2014

- Evaluate "all products and processes that include primary microplastics and act, if appropriate, to reduce their impact on the marine environment";
- Raise public awareness of the "occurrence, impact and prevention of marine litter, including micro plastics".

#### 3.2 Legislative ban

In 2015, the United Nations Environment Programme (UNEP) called for an eventual phase-out and ban on the use of plastics in cosmetics and personal care products.<sup>33</sup> In August 2016, the Environmental Audit Committee called for legislation to ban microbeads in the UK by the end of 2017 (see section 4).<sup>34</sup>

Legislative bans have been introduced in Canada and the USA at both state and federal-level. For example:

- Illinois amended its <u>Environmental Protection Act</u> to ban the manufacturing or sale of personal care products and over the counter drugs containing microbeads. The ban will apply from December 2017. The legislation put an upper limit of 5mm on the size of microbead.<sup>35</sup>
- California amended its <u>Public Resources Code</u> to prohibit from 2020 the selling or offering for promotional purposes a personal care product containing plastic microbeads. The legislation exempts products containing less than 1 part per million (ppm) by weight of plastic microbeads.<sup>36</sup>
- The United States Congress passed the <u>Microbead-Free Waters</u> <u>Act of 2015</u>, which would amend the Federal Food, Drug, and Cosmetic Act "to ban rinse-off cosmetics that contain intentionally-added plastic microbeads beginning on January 1, 2018, and to ban manufacturing of these cosmetics beginning on July 1, 2017".<sup>37</sup>

#### Is a ban necessary?

A research report commissioned by the European Commission noted that a European ban might not be necessary given that a number of producers had committed to phasing out microplastics. To determine if a ban was necessary, the report said that there needed to be:

- Further work to understand the sources of cosmetic microplastics;
- The agreement of a definition of microplastics that did not contain "loopholes";
- Improved monitoring of microplastics in cosmetic and personal care products.<sup>38</sup>

<sup>38</sup> ibid

<sup>&</sup>lt;sup>33</sup> UN environment agency urges ban of microplastics in cosmetics and personal care products, UN New Centre, 16 June 2015

<sup>&</sup>lt;sup>34</sup> Environmental Audit Committee, <u>Environmental impact of microplastics</u>, Fourth Report of Session 2016–17, (24 August 2016), HC 179

<sup>&</sup>lt;sup>35</sup> Public Act 098-0638, Illinois General Assembly, 1 January 2015

<sup>&</sup>lt;sup>36</sup> Assembly Bill No.888, State of California, 8 October 2015

<sup>&</sup>lt;sup>37</sup> Microbead-Free Waters Act of 2015, US Congress, 28 December 2015

In April 2016, the Government said it would explore a ban on the use of microbeads in cosmetics "particularly if the voluntary approach is deemed inadequate".<sup>39</sup>

The Cosmetic Toiletry and Perfumery Association noted that significant reductions in the release of microplastics had already probably been achieved from the voluntary approach, and that "most uses of plastic microbeads will stop before 2020".<sup>40</sup> It also noted that only a small percentage of microplastic pollution was from these products. It said that it had a "legitimate expectation that other contributors to the problem will be required to act too".<sup>41</sup>

The Environmental Investigation Agency said that microbeads "are a totally unnecessary source of microplastic pollution". It believed that a ban was needed "to speed progress, maintain commitments and ensure a level playing field for manufacturers". It said that a "ban on microbeads [was] a simple step towards eliminating an unnecessary source of plastic pollution".<sup>42</sup>

#### Can microplastics be banned at an EU level?

In December 2014, the Netherlands, Austria, Luxembourg, Belgium and Sweden issued a joint statement to EU environment ministers calling for an EU ban on micro-plastics in cosmetics and detergents.<sup>43</sup> In May 2016, the UK Government has said that it was "supporting other EU Member States in calling for the European Commission to come up with proposals to ban microbeads in cosmetics and detergents".<sup>44</sup>

A coalition of UK environmental NGOs<sup>45</sup>, have called for a "UK and EU ban on all microplastic use in all down-the-drain consumer products". The coalition stated that such legislation should include:

- All solid microplastic ingredients (where microplastics are defined as particles <5mm with no lower size limit);
- All product types reaching domestic, commercial or industrial drainage;
- No exemptions for "biodegradable" plastics; and
- Deadline for implementation within two years from announcement<sup>46</sup>

A recent research report commissioned by the European Commission looked at what EU mechanisms were available to reduce microbead pollution from cosmetics. It concluded that introducing a ban on

<sup>&</sup>lt;sup>39</sup> Written evidence submitted by Defra to the Environmental Audit Committee inquiry into the environmental impacts of microplastics, 26 April 2016

<sup>&</sup>lt;sup>40</sup> Cosmetic Toiletry and Perfumery Association, personal communication, 25 May 2016

<sup>41</sup> ibid

<sup>&</sup>lt;sup>42</sup> <u>Petition: Urgent UK action is needed to ban microbeads</u>, Environmental Investigation Agency, 20 February 2016

<sup>&</sup>lt;sup>43</sup> <u>Elimination of micro-plastics in products - an urgent need - Information from the Belgian, Dutch, Austrian and Swedish delegations, supported by the Luxembourg delegation</u>, Council of the European Union, 3 December 2014

<sup>&</sup>lt;sup>44</sup> PQ 35904 [on Seas and Oceans: Pollution Control], 4 May 2016

<sup>&</sup>lt;sup>45</sup> The Environmental Investigation Agency, Fauna & Flora International, Greenpeace UK and Marine Conservation Society

<sup>&</sup>lt;sup>46</sup> The Environmental Protection Agency, personal communication 24 May 2016

microbeads in the EU would be more complicated than the laws "used in the US and Canada". It said that it was "unclear as to whether any of the [existing] Directives and Regulations" that had been identified "would be suitable".<sup>47</sup>

The report identified the following mechanisms, and their key limitations:

- Cosmetics Regulation—Concerned with health rather than environmental impact;
- REACH Directive—Concerned with individual chemicals and does not recognise 'plastic' as a term;
- Eco Design Directive—Is currently aimed at energy using products; and
- Urban Waste Water Treatment Directive—May be cost prohibitive and ultimately not 100% effective at removing microplastics from water effluent.

The report concluded that the Eco Design Directive "may have the most potential" provided that this option was supported by a Member State".<sup>48</sup>

#### Box 1: Can microplastics be banned unilaterally by EU Member States?

No EU Member State has as yet tried to introduce a national ban on microplastics, so the principle has not been tested in law. Nevertheless, it appears possible that a national ban could be introduced if a Member State could show that a ban did not contravene the EU Treaties that prohibit Member States from introducing measures that restrict the free movement of goods.

As a national ban on microbeads could be considered to restrict the free movement of goods, a Member State would have to show that the ban was justified. It might be able to do this on environmental protection grounds, which is permitted by Article 191 of the Treaty on the Functioning of the European Union. The Article allows Member States to introduce measures that may interfere with trade "for non-economic environmental reasons".<sup>49</sup>

In demonstrating the need to introduce a national ban a Member State would have to satisfy a number of conditions. For example it might have to show that the ban was:

- Proportionate (i.e. that a ban rather than a different measure was the most appropriate response to the problem);<sup>50</sup>
- Non-discriminatory (for example, a ban could not discriminate between products produced in the Member State and elsewhere in the EU);<sup>51</sup>
- Was based on the best scientific evidence available, and that the evidence gave reasonable grounds for concern about the possible dangers to the environment or health.<sup>52</sup>

The Swedish Chemicals Agency (a Swedish Government Agency) assessed the microbeads issue. It concluded that a national ban of microbeads in Sweden could be formulated to satisfy these requirements.<sup>53</sup>

- <sup>52</sup> Communication from the Commission on the precautionary principle, COM/2000/0001, 2 February 2000
- <sup>53</sup> Proposal for a national ban on plastic microbeads in cosmetic products, Swedish Chemicals Agency, 2016

<sup>&</sup>lt;sup>47</sup> <u>Study to support the development of measures to combat a range of marine litter</u> <u>sources</u>, Eunomia, 29 January 2016

<sup>&</sup>lt;sup>48</sup> ibid

<sup>&</sup>lt;sup>49</sup> OJ C326, 26 October 2012

<sup>&</sup>lt;sup>50</sup> EU law and its interpretation in the UK, Practical Law Public Sector, viewed on 24 May 2016

<sup>51</sup> ibid

#### 3.3 UK actions to ban microbeads

A UK parliamentary petition called for "a ban on microbeads in in all cosmetic products sold in the UK". The petition closed in January 2016 after receiving 14,715 signatures. At the time the Government responded that it was "working with industry to achieve a voluntary phase out".<sup>54</sup> However, in September 2016, the Government announced that it planned to ban microbeads in cosmetics and personal care products by October 2017.<sup>55</sup> The Government also explained that it would publish and consult on its plans later in 2016.

Commenting on these plans, Defra Secretary of State, Andrea Leadsom, explained that "most people would be dismayed to know the face scrub or toothpaste they use was causing irreversible damage to the environment, with billions of indigestible plastic pieces poisoning sea creatures."<sup>56</sup>

## Consultation to ban microbeads in cosmetics and personal care products

On 20 December 2016, the Government published its consultation on proposals to ban microbeads in cosmetics and personal care products by October 2017.<sup>57</sup> The consultation document also asks for further evidence on the extent of the environmental impacts of microplastics found in other cosmetics and personal care products (such as make-up and suncreams) or from other products containing microbeads such as household and industrial cleaning products.<sup>58</sup>

The consultation closes on 28 February 2017.

The Marine Conservation Society welcomed news of the Government's plans. Dr Laura Foster, Head of Pollution at the Marine Conservation Society, said:

It's great the Government announced its intention to ban microbeads in cosmetics and personal care products. This consultation gives an opportunity to show the UK can be a world leader in improving the health of our oceans and reducing microplastic pollution.<sup>59</sup>

#### Scope of the proposed ban

The consultation document sets out the scope of Defra's proposed ban, which would apply to both the manufacture and sale of cosmetics and personal care products containing microbeads (solid microplastic ingredients <5mm in size in every dimension) in all of the UK. It does not apply to microplastics found in other cosmetics and personal care

<sup>&</sup>lt;sup>54</sup> Ban the use of plastic microbeads in all cosmetic products sold in the UK, Petitions, closed 23 January 2016

 <sup>&</sup>lt;sup>55</sup> Defra, <u>"Microbead ban announced to protect sealife"</u>, *gov.uk*, 3 September 2016
 <sup>56</sup> ibid

<sup>&</sup>lt;sup>57</sup> Defra, <u>"Government sets out next steps to ban microbeads"</u>, gov.uk, 20 December 2016

<sup>&</sup>lt;sup>58</sup> Defra, <u>"Proposals to ban the use of plastic microbeads in cosmetics and personal care products in the UK and call for evidence on other sources of microplastics entering the marine environment,"</u> December 2016

As quoted in: Defra, <u>"Government sets out next steps to ban microbeads"</u>, gov.uk,
 20 December 2016

products or from other products containing microbeads such as household and industrial cleaning products.<sup>60</sup>

In England, Defra expect legislation to enact this ban to come into force by 1 October 2017, with plans to coordinate with the Devolved Administrations and their own legislative processes and timetables. Moreover, Defra expect the ban on manufacture to apply from 1 January 2018, with the ban on sales expected from 30 June 2018.<sup>61</sup>

<sup>&</sup>lt;sup>60</sup> Defra, <u>"Proposals to ban the use of plastic microbeads in cosmetics and personal care products in the UK and call for evidence on other sources of microplastics entering the marine environment,"</u> December 2016

### 4. Select committee inquiry

The Environmental Audit Committee launched an <u>inquiry into the</u> <u>environmental impact of microplastics</u> on 18 March 2016, and published their <u>report</u><sup>62</sup> on 24 August 2016. During the inquiry, the Committee heard from a range of stakeholders, including representatives of water and waste companies, cosmetics companies, environmental NGOs, and marine pollution experts among others.

Announcing the publication of the report on 14 November 2016, the <u>Committee Chair Mary Creagh MP commented</u>:

"Trillions of tiny pieces of plastic are accumulating in the world's oceans, lakes and estuaries, harming marine life and entering the food chain. The microbeads in scrubs, shower gels and toothpastes are an avoidable part of this plastic pollution problem. A single shower can result in 100,000 plastic particles entering the ocean.

Cosmetic companies' voluntary approach to phasing out plastic microbeads simply won't wash. We need a full legal ban, preferably at an international level as pollution does not respect borders.

If this isn't possible after our vote to leave the EU, then the Government should introduce a national ban. The best way to reduce this pollution is to prevent plastic being flushed into the sea in the first place." <sup>63</sup>

In the course of the inquiry, the committee heard that around 680 tonnes of plastic microbeads are used in the UK every year, and that a single shower can result in 100,000 plastic particles entering the sewage system. The committee heard little evidence of potential human health impacts. But suggested that the Government should nevertheless set out a timescale within which it will publish its ongoing assessment and any measures it intends as a response. The committee also found that labelling regulations were failing to provide consumers with the clarity they need.

The committee welcomed the commitment by a section of the cosmetics industry to phase out microbeads, but noted that the commitment is not universal, and that there are inconsistencies in approach. The Committee therefore called for a national ban on microbeads by the end of 2017.

More information about the inquiry, and the evidence received, <u>can be</u> <u>found here</u>.

<sup>&</sup>lt;sup>62</sup> Environmental Audit Committee, <u>Environmental impact of microplastics</u>, Fourth Report of Session 2016–17, (24 August 2016), **HC 179** 

<sup>&</sup>lt;sup>63</sup> Environmental Audit Committee, <u>"MPs urge Government to ban microbeads in cosmetics"</u>, 24 August 2016

#### 4.1 Government response

The <u>Government response</u> to the committee was published on 14 November 2016.<sup>64</sup> In this response the Government said that it would:

- consult on its proposed ban on microbeads in cosmetics;
- gather evidence on the environmental impacts of microbeads found in other household products, such as domestic and industrial cleaning products;
- look at what more can be done to tackle other sources of microplastics entering the marine environment; and
- ask the Chief Medical Officer to review the impact on human health of microplastic pollution.<sup>65</sup>

<sup>&</sup>lt;sup>64</sup> Environmental Audit Committee, <u>Environmental impact of microplastics:</u> <u>Government Response to the Committee's Fourth Report of Session 2016–17</u>, Fifth Special Report of Session 2016–17, (14 November 2016), **HC 802** 

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