

The International Joint Commission (IJC)
100 Ouellette Avenue, 8th Floor
Windsor, ON N9A 6T3

November 4th, 2016

Dear Sir or Madam,

Lake Ontario Waterkeeper submits the following comments on the Preliminary International Joint Commission Recommendations on Microplastics in the Great Lakes.

Overall, the recommendations are a strong foundation upon which the issue of microplastics can continue to be addressed. However, there are some important considerations that should be taken into account and incorporated into the recommendations.

The definition of 'microplastics' needs clarification and non-plastic microdebris issues need to be addressed.

In understanding the environmental impacts of microplastics, the types of materials classified under the term 'microplastics' needs to be clarified. For example, microfibers are one of the most common types of microdebris in aquatic environments and are generally classified as being within the scope of the microplastic problem. However, recent research suggests that a significant portion of the microfibers in aquatic environments may not be made of plastic at all. Rather, many of the fibres are comprised of cellulose, particularly in the form of the semi-synthetic fibre rayon. Studies of microplastics sometimes fail to properly distinguish between the different materials present in microdebris samples. Materials such as rayon may pose different levels of risk than plastics, as cellulosic fibres may not be a significant environmental issue on its own, but may also act as a vehicle for other toxic chemicals. The failure to distinguish plastic from non-plastic has the potential to result in misleading assessments of environmental impacts.

While it will be important to be aware of the potential misclassification of some microdebris, it is also important to continue to include non-plastic microdebris within the scope of the microplastic problem. There are still significant knowledge gaps in the sources and ultimate environmental impacts of non-plastic microdebris and therefore research in this area needs to be done in conjunction with the continued studying of the microplastic problem as a whole. At the current point in our

understanding of the microplastic problem, we cannot risk ruling out potentially impactful problems just because the material does not technically qualify as a plastic.

Proper garbage disposal education and prevention should have a focus on wastewater systems and manufacturers should take on a greater responsibility.

In regards to the pollution and education portion of the recommendations, we would like to see that a focus is given to reducing microplastics that enter water systems via wastewater treatment plants. While there is scientific uncertainty, municipal wastewater treatment plants may be a source of microplastics. As these recommendations already address the knowledge gaps of pathways of microplastics, public education programs could be an effective stopgap for the potential issue. Education could entail educating the public in regards to what kind of materials may be disposed down toilets. For example, some products may be labelled as flushable, but may in fact contribute to microplastic issues.

We would also like to see responsibility for education and pollution prevention extend beyond the Parties to include the manufacturers of products that contribute to microplastics. These manufactures should be obligated to ensure that the consumers of their products understand proper disposal. These producers could have responsibilities including public education, development of stronger package labelling, and continued sponsorship of microplastic prevention programs. Currently, the Education and Outreach section does not clearly address what further responsibilities these manufactures should have, nor does it contain language strong enough to encourage a change in the behaviour of the manufactures.

Thank for you providing the opportunity to comment on these recommendations.

Sincerely,

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