

November 10, 2016

Michael Toope (by email to [toopem@ottawa.ijc.org](mailto:toopem@ottawa.ijc.org))  
International Joint Commission  
234 Laurier Avenue West, 22nd Floor  
Ottawa, ON K1P 6K6

Frank Bevacqua (by email to [bevacquaf@washington.ijc.org](mailto:bevacquaf@washington.ijc.org))  
International Joint Commission  
2000 L Street NW, Suite #615  
Washington, DC 20440

**Re: Comments on *Preliminary Recommendations on Microplastics in the Great Lakes***

Dear Messrs. Toope and Bevacqua:

The Council of Great Lakes Industries (CGLI) provides these comments regarding the Commission's *Preliminary Recommendations on Microplastics in the Great Lakes*. CGLI is a binational non-profit organization representing the common policy interests of Canadian and U.S. industrial organizations that have significant assets in the Great Lakes region. The mission of CGLI is to promote the growth and vitality of the region in harmony with its human and natural resources (sustainable development).

CGLI has worked with the IJC, the Canadian and U.S. governments, as well as the Great Lakes states and provinces on water resources management issues since our organization was established in the early 1990s. More recently, CGLI coordinated industry's participation in the Commission's workshop regarding microplastics in the Great Lakes and provided comments on draft proceedings from that workshop. CGLI would like to thank the Commissioners and Commission staff for the opportunity to participate in this important collaboration process.

**Knowledge Gaps are the Key Issue**

CGLI agrees with the Commission's observation, as stated in the call for comments, that there are "significant knowledge gaps and (a) need for further information to address causes and impacts of microplastics." Filling these gaps through research in a number of areas needs to be the first priority and should precede the drawing of conclusions, including those contained in the announcement and call for comments. Although we have all agreed that plastics and other debris should not be in the Lakes, it is premature to draw the conclusion that the presence of microplastics is "potentially a significant threat to the Great Lakes ecosystem and human health." We need much more information before we can draw firm conclusions. Understanding the potential for impact is just one of the critical knowledge gaps that needs to be filled.

**Understanding the Source of Microplastics is Essential**

The most important factor in understanding the details behind the presence of microplastics is, specifically, where do they come from? From what portion of the plastic material's life cycle, and under what circumstances, do the microplastics found in the ecosystem emerge? Knowing

this is critical to the ability to develop management actions that will actually reduce the amount of microplastics that end up in the environment. Plastic materials are used to satisfy needs within all portions of societal life. A minor portion of plastics end up as microplastics of concern. Only through knowing where, specifically within the life cycle, the microplastics come from will it be possible to develop effective source reduction actions. The Commission's recommendations on research priorities need to identify this specific knowledge gap.

### **Better Information is Needed on Microplastic Distribution**

Researchers have only begun to understand the distribution of microplastics found in the Great Lakes systems. Enhancing knowledge regarding the distribution of these materials between different lakes, and between nearshore and open lake areas within each lake, are other important needs. Much of the available scientific information regarding microplastics in the environment comes to us from the marine environment. Also needed is an understanding of differences, if any, between the processes that are responsible for converting plastic articles into microplastics in the marine world vs. fresh water systems. All of this information is necessary to guide development and decision making regarding Great Lakes-specific management actions. The Commission's recommendations should highlight these needs.

### **Understanding Environmental/Health Risks is Also Needed**

Much more work is needed, especially in fresh water systems, to characterize and understand microplastic environmental and health risks. Risk assessment methodologies need to be employed to fill these knowledge gaps. Additionally, care should be taken to avoid making sweeping statements regarding risks until this work is completed. For example, a UNEP paper entitled *Marine plastic debris and microplastics – Global lessons and research to inspire action and guide policy change*, concludes that “microplastics in seafood do not currently represent a human health risk, although many uncertainties remain.”<sup>1</sup> The paper stresses the importance of employing thorough risk assessment analyses to characterize these risks. The Commission should identify risk assessment analysis as a specific need.

### **Market-based Bans or Use Fees Will Not Solve the Problem**

A holistic approach is needed to address the microplastics issue. As outlined above, it is important to determine the root cause and sources responsible for microplastics found in the Lakes. In addition, simple solutions such as covering waste barrels, changing the schedule pick-up days for recycled or discarded materials from public places, and other measures as described within the NOAA Marine Debris Program are known to make a difference. Bans or fees alone do not address the root cause – i.e. improper handling of plastic materials. Other plastic materials not subject to bans or fees will still be treated using the practices that create the microplastics. The Commission should recommend that the governments seek improved understanding and application of plastic materials stewardship that will address the real cause of the issue.

---

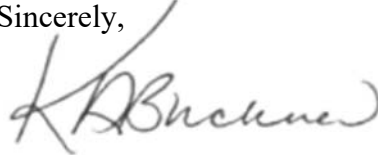
<sup>1</sup> This document is available at:

<http://www.unep.org/about/sgb/Portals/50153/UNEA/Marine%20Plastic%20Debris%20and%20Microplastic%20Technical%20Report%20Advance%20Copy.pdf>

Letter to Messrs. Toope and Bevacqua  
November 10, 2016  
Page 3

CGLI appreciates the opportunity to provide comments and offer these in an effort to support enhanced coordination within the Great Lakes region on resource management policy. Please contact us with questions or requests for additional information.

Sincerely,

A handwritten signature in black ink, appearing to read 'K. Buckner', written in a cursive style.

Kathryn A. Buckner, President

A handwritten signature in black ink, appearing to read 'Dale K. Phenicie', written in a cursive style.

Dale K. Phenicie, Technical and Projects Director

Cc: [commission@ottawa.ijc.org](mailto:commission@ottawa.ijc.org)  
[commission@washington.ijc.org](mailto:commission@washington.ijc.org)