



October 29, 2013

Gina McCarthy  
E.P.A. Administrator  
USEPA Headquarters  
Ariel Rios Building  
1200 Pennsylvania Avenue, N.W.  
Mail Code: 1101A  
Washington, D.C. 20460

Dear Administrator McCarthy:

The health of the Great Lakes and St. Lawrence River are critical to the livelihood of the millions of people that live in the Great Lakes region. This crucial ecosystem is endangered by the presence of microplastics, a significant new pollution threat recently uncovered in the Great Lakes. I am writing as Chair of the Great Lakes and St. Lawrence Cities Initiative to express the concern of American and Canadian Mayors on this issue, and to inquire as to EPA's plans to address this serious threat to our important shared resource.

The Great Lakes and St. Lawrence Cities Initiative is a binational coalition of Mayors and other local officials that works actively with federal, state and provincial governments to advance the protection and restoration of the Great Lakes and St. Lawrence River. We represent over 100 American and Canadian cities of all sizes.

Microplastics are plastic debris smaller than 5mm in diameter. They include industrial broken fragments, polystyrene pieces, cosmetic product residues and synthetic textile fibers found in many common consumer products including toothpaste, deodorants, body washes, hand cleansers and facial exfoliate.

In summer 2012, Dr. Sherri Mason, a professor at SUNY Fredonia, recorded the plastic content of Lake Huron, Lake Erie and Lake Superior and discovered microplastics in greater concentrations in Lake Erie than any other body of water on Earth, with concentrations exceeding data collected in the Great Pacific Garbage Patch. Alarming levels were also present in Lakes Huron and Superior. These findings were confirmed in a peer-reviewed article released this week by the 5 Gyres Foundation.<sup>1</sup>

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<sup>1</sup> Eriksen, M., et. al. Microplastics Pollution in the Surface Waters of the Laurentian Great Lakes. Mar. Pollut. Bull. (2013).

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*Keith Hobbs, Mayor of Thunder Bay, Chair*

*Régis Labeaume, President of Québec Metropolitan Community, Vice-Chair*

*John Dickert, Mayor of Racine, Secretary-Treasurer*



These microplastics pose a number of threats to the Great Lakes. Firstly, fish, birds and other wildlife ingest the plastics. This can cause internal blockage, dehydration and death in these species. Secondly, they affect the quality of ecosystems and habitats. The presence of microplastics on beaches changes the physical properties of the beach, which may contribute to the permeability of beach sand and affect organisms dependent on land temperature. Thirdly, and most significantly, these microplastics transport other pollutants. They absorb pollutants already in the water, such as DDT, polyaromatic hydrocarbons (PAHs) and polychlorinated biphenyls (PCBs). When ingested either by wildlife or humans (either directly or indirectly), these plastics contain super-concentrations of these dangerous toxins. The toxins become even more concentrated and dangerous as they bioaccumulate in the food chain.

The Mayors of the Great Lakes and St. Lawrence Cities Initiative would like to inquire as to the scope of EPA's efforts to combat this growing threat. Specifically, we would like to know the extent of EPA's research into the threat posed by microplastics to both the ecosystem and human health. We would also like to know what the EPA is doing and plans to do in the future to eliminate future additions of microplastics to the waters of the Great Lakes and St. Lawrence. Finally, we would like to know of EPA's plans to clean up the high concentrations of microplastics already present in the Great Lakes.

We appreciate EPA's shared concern over this important issue. My organization is also reaching out to Environment Canada, the top producers of microplastics and public constituencies. We look forward to working together to resolve this important issue.

Sincerely,

Mayor Keith Hobbs, City of Thunder Bay  
Chair, Great Lakes and St. Lawrence Cities Initiative