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Attachment No. 2

Zero Waste Oxford

Commentary

on

Canada Gazette, Part I, Volume 155, Number 52

Single-Use Plastics Prohibition Regulations

Zero Waste Oxford is proud to support the Oxford County Staff analysis of Canada's proposed Single-Use Plastics Prohibitions Regulations for the following reasons:

- Oxford County staff's analysis brings forward useful information related to the production, use and final destinations of plastics in Canada
- Single-use plastics are high percentage of waste, and are both expensive and difficult to treat
- Subnational approaches can only be of some limited effect.

The last of these points does not negate the fact that subnational governments, for instance Ontario's in the promulgation of the 'Waste-Free Ontario" and the "Resource Recovery and Circular Economy" acts can have outsized impacts. Further, Zero Waste Oxford notes that the proposed regulations account for the medical and similar needs of the population, showing clear thinking combined with compassion. None the less, Zero Waste Oxford comments and recommendations to the Government of Canada expand on those of staff.

Zero Waste Oxford notes and approves of the six federally-targeted categories for elimination or significant reduction of single-use plastics for

- Check-out bags, also known as grocery bags or T-shirt bags
- Disposable cutlery, traditional or sporks
- Foodservice wares, e.g., plastic takeout dishes
- Ring-carriers e.g., to hold six-packs of beverages
- Stir-sticks aka beverage stirrers
- Straws (though the medical exemption is important here).

While these are only 6% of plastic waste, they are easily replaced by sustainable alternatives, are visible reminders to the public and therefore educational as well as symbolic, address waste in the industrial and commercial sectors, and offer opportunities to cause thinking about other plastics which could be prevented from entering the waste stream where plastics constitute 4.7 million tonnes annually.

Recycling rates, even after decades of blue box programs, only move about 9% of plastic materials to recovery. 86% of plastic wastes go to landfills. 4% of plastics are burned, of which a fraction for energy, in itself controversial. The 1% of plastics which end up in water, soils, and by that combination in plant and animal life imperil human and environmental health. Micro-plastics from a variety of sources and processes, including from oxo-degradables, have already been identified as a health hazard and have been phased out in facial scrubs in Canada since 2017. Marcus Eriksen, a American scientist “found more [micro-plastics] in the Great Lakes than in any sample anywhere in the world's oceans”[1]. As residents upstream from Lake Erie, where these are in higher counts than Lake Superior, there are reasons for concern for people in Oxford.

Clarity and celerity are present in the development of this regulation. For instance, substitutes for standard plastic check-out bags have variously considered compostable, biodegradable and oxo-degradable bags. All these pose problems. Compostable bags, while suitable for residential waste gathered in the kitchen on its way to underground green-cone digesters or above-ground composters, if mixed with high- or low-density polyethylene film headed to a landfill makes the mix waste, not reusable. Their physical characteristics make sorting difficult. Biodegradable bags can be a variety of materials, including some not suitable for home, industrial or municipal composting programs. They taint a resource recovery stream. Oxo-degradable bags are reduced in size through a variety of processes but with no guarantee that the reduction in size is coupled with a reduction in threat to environmental and human health. Both the comment period and implementation of parts of the regulations come in 2022. It is time to remove toxicants and physical hazards from the environment.

Many aspects of the regulation, backed by scientific theory and evidence, are practical. It recognizes that collection for recycling is more costly in remote and

rural regions. Oxford is the latter. It suggests though that prevention reduces costs; in Oxford County, surpassing the substitutions and suggested reuse rates may require additional education. If a reusable plastic bag represents progress at 100 reuses in urban areas, a higher number is achievable and desirable in rural areas. Any plan to implement the federal regulation needs to recognize that the reduction in littering on land and water is valuable and can be assisted by positive peer pressure by those who engage in roadside clean-ups and maintenance as well as who do riverside and shoreline clean-ups like the Thames River clean-up. In some pilot projects substituting multi-use plastic bags for single-use ones they too were treated as throw-aways. That meant a perverse result where more plastics by volume was discarded where the intent was to reduce plastic waste. This can be avoided by better labelling, public and popular education as well as peer support such as making durable substitutes aspirational. In Europe, it is not only acceptable by fashionable to have a bag in hand when heading out to shop. The stereotype of the baguette in hand, filet of fresh vegetables is useful social marketing. Images of autopsied animals dead from ingestion of plastic bags, struggle or deceased due to being strangled with bag handles, or deformed by the hoops of ring-carriers around their turtle shells, can be part of a moving marketing program for the prevention of single use plastics.

Targets for 90% recycling rates for plastic beverage containers and 50% for other packaging are attainable. In the latter case, the rate could be higher, in particular if the government supports a reduction of mixed materials in packaging. Plastic adhered to cardboard and metals makes for more waste. Packaging needs to contain less to be more environmentally responsible. The 86% of plastics heading to landfills means that the public is directly or indirectly, in the case of municipal and private landfills respectively, subsidizing the petroleum and chemical industries. Similarly, the fact that the petroleum industry is highly subsidized by all Canadians means that virgin plastics are and may remain cheaper than recycling processes and products. Putting a price on carbon that represents the full-cost recovery over its entire lifecycle can have economic, environmental and human health benefits.

Recommendations:

- Encourage residents of Oxford to surpass the substitution rates, using durable and reusable products instead of those with fewer uses
- Recognize the higher costs of recycling programs in rural areas, and therefore offer federal support for innovation and sustainable recovery models [2]
- Engage in nation-wide publicity programs which education on the benefits of non-plastic solutions and fund similar public and popular education at a local level
- Ensure that the costs of the full lifecycle of plastics is applied at the use of virgin product to equalize costs more rapidly[3]
- Given that Canada is not immune to the impacts of the pollution of waterways and oceans, the 40% of plastic bags which Canada exports will ultimately rebound on our environmental and human health. Canada should find alternatives for international as well as internal markets.
- Continue at a federal level to find markets for recoverable plastics, to encourage innovation, to eliminate by importation and production bans, to analyse the harmful impacts of plastics[4] and act on them quickly and effectively.

Sources

Note that all unassigned quotations and references are from Canada Gazette, Part I, Volume 155, Number 52: Single-Use Plastics Prohibition Regulations

Additional sources:

1. https://www.cbc.ca/news/canada/thunder-bay/facial-scrubs-polluting-great-lakes-with-plastic-1.1327850
2. https://ofa.on.ca/northern-ontario-plastics-disposal-pilot-project/ offers a model that could be supported in other rural areas.
3. https://environmentaldefence.ca/report/the-elephant-in-the-room-canadas-fossil-fuel-subsidies/
4. https://abcnews.go.com/US/plastic-bag-bans-helping-environment-results/story?id=68459500

5. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2873020/