
MEMORANDUM

WMPSC-C 6-2020

Subject: Information on Plastic Garbage Bags

Date: Monday, January 27, 2020

To: Waste Management Planning Steering Committee

From: Susan McPetrie, Waste Management Services Advisor

This memorandum provides information on the tonnage of plastic garbage bags being collected by Niagara Region annually and the options for mitigating the use of these bags. It is provided in reference to the Councillor Information Request from the October 28, 2019 meeting of the Waste Management Planning Steering Committee, Minute Item #3.1.

Annual Tonnage of Plastic Garbage

Niagara Region does not have data for the precise tonnage or number of garbage bags being collected each year. Curbside audits do not provide counts of bags specifically, only full container equivalents. However, data from the Region's 2015/2016 Seasonal Low-Density Residential Dwelling Curbside Waste Composition Study provides a close approximation of the tonnage of garbage bags going to the landfill. For that study, waste was sorted into standard categories based on Stewardship Ontario's waste audit protocol. Garbage bags were sorted into the LDPE/HDPE film products (non-packaging) category. This category accounts for 4.16 kg/household/year or 1.3% of the garbage stream by weight. Other municipalities using the same study methodology report similar data for these products.

Mitigation

An increasingly common approach to mitigating the use of single-use plastics items, such as garbage bags, is to introduce a ban on specific products. Implementing, promoting and enforcing this type of ban at a regional level would present challenges. Many single-use plastic bans are implemented through legislation on the sale and distribution of the targeted product. As described in more detail below, this would involve determining which products are included in the ban, which businesses are subject to the legislation and how to manage products coming from outside of the region (i.e. online or other municipalities). Alternatively, a ban on the use of plastic garbage bags would require additional resources to communicate and enforce.

Single-use plastic bans have been proposed at the Provincial and Federal level. This broader level of legislation would facilitate the transition to removing single-use plastics from the waste stream. The Federal government's single-use plastics ban is scheduled

to start in 2021, however implementation details including target items, have yet to be released. At this point, a scientific assessment of plastic pollution is underway and public consultation by the Federal government is planned.

At the Provincial level, Bill 82, Single-Use Plastics Ban Act, 2019 was introduced to amend the Resource Recovery and Circular Economy Act, 2016. It specifies that within one year after the day that the Act receives Royal Assent, the minister shall amend the strategy to include a plan to identify measurable targets and timelines for the reduction and eventual elimination of single-use plastics, including plastic straws, stir sticks, expanded polystyrene foam food and beverage containers, plastic bags, disposable coffee cups and plastic water bottles intended for single use.

The intention of single-use plastics bans is to decrease the amount of plastic entering the natural environment. However, in selecting items to include in these bans, the net environmental impact must be considered as alternatives may also present significant environmental challenges. Garbage bags are an effective method of controlling litter. One of the key pathways for plastics entering the environment, waterways and oceans is from litter and inadequately managed waste. Garbage that is not secured during storage or transport is at risk of leakage to the natural environment.

Alternative or substitute products, such as compostable or oxo-degradable plastic may create their own environmental issues. Compostable materials that are disposed of in the landfill do not have the necessary conditions to breakdown (i.e. oxygen). Certified compostable materials are verified to breakdown in industrial composting facilities, not landfills. Oxo-degradable products are conventional plastic materials that include additives which, through oxidation, lead to accelerated breakdown. These materials fragment into microplastics that have the potential to remain in the environment for long periods of time.

Considerations

Since garbage bags are readily available for purchase, are not entering the natural environment and are being directed to secure landfill sites, restricting the use of garbage bags for curbside collection may be unduly onerous at this time and reduce flexibility for residents and businesses. Maintaining service users' convenience, including the ability to choose the container type that is best suited to their situation (e.g. rural residences with long driveways) may be preferred as bags are also used for containing recyclables in order to avoid windblown litter. Requiring the use of garbage cans, instead of bags, may also create a storage challenge for residents and businesses with limited space that would need to store two (2) cans for every-other-week garbage collection and potentially additional cans for occasions when the limit is exceeded (e.g. amnesty week).

Another challenge to implementing a plastic garbage bag ban at the Regional level includes defining the type of products that would be banned, as plastic bags are pervasive and many variations are available online and in retail outlets, including plastic grocery bags, which are sometimes used for containing garbage even if a garbage can is used to set out material for collection. Plastic bags are widely used for a number of functions, including lining indoor garbage receptacles and public space recycling containers in some municipalities.

Without a broader Federal or Provincial policy to support a ban, there would be additional communication and promotion resources needed to inform service users of the change. Also, in addition to the current enforcement needed on-road to ensure adherence to the existing Waste Management By-law, a garbage bag ban would require more resources to enforce.

As demonstrated by other municipalities, introducing a targeted single-use plastics ban can be a significant, multi-year undertaking. For example, in Vancouver, where a ban on foam cups and containers began January 1, 2020, a ban on plastic straws will start on April 22, 2020 and a ban on plastic bags will take effect on January 1, 2021, the process was initiated in 2016 with two (2) years of stakeholder consultation. In addition to engagement with residents, industry and other relevant stakeholders, the development of an effective single-use item reduction strategy involves identifying target products, acceptable alternatives, annual reduction targets and potential exemptions. Once the required bylaw amendments are approved, educational outreach and phased-in enforcement facilitate transition and implementation. Efforts to undertake this process at a regional level at this time should take into consideration the Federal work on single-use plastics that is currently underway.

Next Steps

Plastic garbage bags currently represent a small proportion of Niagara Region's residential waste stream by weight, approximately 1.3%. These products are being directed to secure landfill sites and are not entering the natural environment. Plastic garbage bags also provide an effective method of containing materials and preventing litter. Restricting the use of plastic garbage bags may unduly reduce service user's flexibility and convenience.

In terms of broader action on single-use plastic items, as both the Provincial and Federal levels of government move forward with legislation on these items, Niagara Region can continue to monitor that progress to determine the most effective steps to coordinate and complement those regulations. Additionally, policies and initiatives to reduce waste, including single-use plastics, will be included in Niagara Region's long-term waste management strategic plan and associated stakeholder engagement.

Respectfully submitted and signed by

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