
Subject: Blue Box Lids and Covers

Report to: Waste Management Planning Steering Committee

Report date: Monday, June 28, 2021

Recommendations

1. That the Waste Management Planning Steering Committee **RECOMMEND** to the Public Works Committee the following:
 - a) That staff **BE DIRECTED** to continue promoting the availability of recycling box lids and covers through public retail and on-line outlets, using Regional communication avenues, in place of offering recycling box lids or covers.

Key Facts

- This report is a response to a request from Councillor Foster at the April 13, 2021 Public Works Committee meeting for staff to reinvestigate nets as covers for curbside recycling boxes to support the reduction of litter observed in Niagara region communities.
- Niagara Region permits the use of alternate containers, including lids and covers, within the criteria of the Waste Management By-Law, to contain recyclable materials.
- Municipal pilot programs that tested the use of lids and covers on recycling boxes saw: low usage rates; overfilling of containers causing spilled materials upon collection; slower collection rates and injury to collection staff; compatibility issues between boxes and covers of different sizes; and loose and lost covers resulting in requests for replacement.
- Niagara's own pilot project in 2019/2020 resulted in the same conclusions as other municipal pilots.
- On June 3, 2021, the Government of Ontario finalized the Blue Box Regulation under the Resource Recovery and Circular Economy Act, 2016 requiring producers to operate and fund the collection and processing of residential blue box materials. Under this new framework the residential Blue Box program could look very different from Niagara's current box-based recycling program. Niagara's residential Blue Box program will transition over to the new framework on January 1, 2024.

Financial Considerations

Based on the budget pressures and restrictions that will continue into 2022, and the uncertainties presented by COVID-19, Waste Management Services continues to deliver essential services to our residents, businesses and community partners. Although the few municipalities that offer recycling box covers do so at full cost recovery, the issue of box lid/cover loss (dumped into collection trucks or blown away) will initiate a demand for free replacements.

Analysis

Municipalities Using Recycling Box Covers

Appendix A provides a list of those municipalities that are currently offering recycling box covers or a container with a lid as an option to residents. These five municipalities are offering the sale of optional recycling box covers/lids to residents at full cost. While most have noted that the covers help keep material from escaping when the boxes are blown over, they have also stated that use of the covers slows down collection times; and allows residents to overfill the containers causing the material to spill out once the covers are removed. These municipalities also noted that there has been low uptake for lids and covers.

Another observation included the complications in offering one standard lid to residents due to new procurement processes/vendors resulting in new recycling box sizes every few years. In order to avoid this problem, one municipality offers an optional mesh net that can be used on different sized containers. However, they have also noted, similar to the municipalities offering lids, that the collection contractor has expressed concerns regarding the increased time needed for collection with nets, as well as the tendency for residents to overfill these covered containers causing the material to spill out during collection. This spillage can add to the litter problem.

Municipalities that Decided Against Using Recycling Box Covers

Municipalities that have considered a cover for recycling boxes have to contend with the light nature of these covers and how they can be easily lost, accidentally deposited into recycling trucks, or blown away by wind. Additionally, consideration has to be made regarding the negative impact on collection efficiency rates and the impact on collection staff (i.e. difficulty maneuvering lids/covers with gloves, injury when nets snap back).

Appendix B lists a number of municipalities that considered the use of covers, but ultimately did not proceed with them. A number of concerns are cited in the appendix, however the most significant issues are noted below:

- Overfilling/overloading by residents caused material to spill when the covers were removed leading to increased litter
- An increase in collection times up to five seconds per household in comparison to the standard recycling box
- Covers were the least favourite resident option, when compared to the 121 L round container with a lid and transparent plastic bags
- Hard covered lids can only be used together with a recycling box that was manufactured by the same manufacturer
- Loose and lost covers can become part of the overall litter problem
- Despite some nets being attached with screws to recycling boxes, the nets still have a tendency to come off of the box and wind up in the truck with the recycling material
- Nets were found to be inefficient and difficult to remove by collection staff in the winter when collection staff are wearing gloves. In the summer, nets tend to snap back at the collection staff causing injury

Niagara Region's waste management staff piloted the use of lids in 2019/2020. Three months after the pilot was completed, only 11% of households were using the lid. Of those pilot households not using the lid, 20% were using clear bags or stacking their boxes to prevent recyclables from blowing around.

Staff recently looked at the recycling box net manufactured in England (recycleboxes.co.uk). This is a string net that stretches over the recycling box made of nylon with an elasticized fabric band to hold it around the box and 'grab and pull' release ribbons. Based on the experience of other municipal pilots, despite the style of the net, the same repeat issues are recognized (extra time to collect; residents overfilling boxes adding to litter problem upon collection; lost nets; replacement costs/concerns).

Collection Contracts

With respect to the use of recycling box covers/lids, Niagara Region's current collection contract states: *"Property Owners may use covers, such as lids or netting, for their Blue/Grey Boxes to prevent materials from blowing out. At present, a minority of property Owners use covers. The Successful Proponent must remove covers with care, so not to cause damage to them. If covers are completely removed by the Successful*

Proponent, the covers must be placed inside the empty Blue/Grey box and returned to the original set-out location.”

Collection staff from both of the Region’s current contractors have indicated a preference for clear bags over recycling box lids/covers to control the potential for litter. While clear bags can support containment of recycling material placed at the curb and reduce litter, clear bags also contribute to higher levels of contamination in the recycling stream as residents may combine both grey box and blue box materials inside of one bag. Clear bags also reduces the efficiency and productivity of the process. As such, recyclable items placed loose in curbside boxes is preferred as it supports a reduction in residue and a reduction in processing costs.

Both Niagara’s current collection contractors have been involved in pilots in other municipalities, and each contractor noted experiences with lids and covers that became warped/damaged or had been blown away by wind. Also noted was a rise in complaints from residents wanting replacements for the lost or damaged recycling box lids/covers. One Region contractor had concerns about a possible decrease in productivity should the prevalence of covers or lids increase; while the other Region contractor highlighted possible health and safety concerns as a result of the repetitive motion involved with routinely removing the recycling box lids/covers if the use of these lids became more wide-spread.

Both Niagara Region’s current collection contractors are performing well. Staff are concerned that the introduction of widespread recycling box covers may negatively impede their performance.

Extended Producer Responsibility

The Government of Ontario has finalized the Blue Box Regulation under the Resource Recovery and Circular Economy Act, 2016, on June 3, 2021 requiring producers to establish, operate and fund residential Blue Box collection and processing systems. The new responsibility framework and collection model in Niagara will be determined over the next two years and will be initiated on January 1, 2024.

The new framework operated by Producers could look very different from Niagara’s current box-based recycling program. Producers may not want recycling box covers due to the potential to slow down curbside collection and the probable need to continually replace covers for residents.

Current Approach

The current educational and promotional approach to dealing with wind-blown litter from curbside recycling boxes includes the following:

- Providing recycling boxes with a larger capacity of 83 litres to minimize the overfilling of recyclables
- Allowing alternate containers with a lid that is clearly marked 'Recycling' as an alternative recycling container, similar to the 121 L containers that are permitted in Richmond Hill, the City of Greater Sudbury and in Ottawa Valley
- Using clear bags - however clear bags are not preferred due to the negative impact on the Recycling Centre operations
- Advising residents that they are able to purchase and use their own recycling box covers and that these can be purchased at local department stores or through on-line vendors, for minimal cost
- Reminding residents that there are no limits to the quantity of recyclables that they are allowed to place at the curbside; and if conditions are windy, advising them to consider holding on to their recycling for set out the following week
- Reminding residents through promotional and educational outlets not to place containers or bags on top of, or behind snowbanks and instead shovel out a space for their waste and recycling material at the curb
- Using social marketing and outreach initiatives to encourage good recycling box set-out practices (i.e. placing heavier materials on top of lighter materials), and the promotion anti-litter campaigns
- Allowing for other containers as permitted in the Regional Waste Management By-Law, providing that they meet the following criteria:
 - Height: 3 feet (91 cm) or less
 - Diameter: 2 feet (61 cm) or less
 - Weight: 22.7 kg (50 lbs.) or less when full
 - Handles: Must have handles to pick up container

An information page has been developed and posted on Niagara Region's website to communicate the above tips to combat litter from curbside waste and recycling placement. The web page reminds residents that they are able to purchase and use their own recycling box covers/lids and that these can be purchased at local department stores such as Canadian Tire and Home Depot for a minimal cost.

Review

Based on the following Niagara Region recommends continuing with the current educational and promotional approach and not distribute covers/lids for curbside recycling boxes.

- results of the municipal blue box lid trials (including Niagara's);
- the potential impact to the safety and efficiency of collection staff;
- the availability of recycling box lids and covers in popular department stores/on-line at reasonable prices, and
- the uncertainty of the collection processes after the Residential Blue Box program transition to the Extended Producer Responsibility framework.

Alternatives Reviewed

Staff researched other municipal programs to determine use and effectiveness of lids and covers. Niagara Region also undertook a pilot to trial covers and lids in 2019 and 2020. Based on the content of this report, including the results of a Niagara Region pilot project, Staff are not recommending that Niagara Region distribute covers or lids for curbside recycling boxes.

Relationship to Council Strategic Priorities

The Region's recommendation to not use curbside recycling box lids/covers supports Council's strategic priority of Responsible Growth and Infrastructure Planning. Promotion of anti-litter strategies, as well as the use of alternate containers, and the availability of recycling box lids and covers at common retail outlets will encourage those that are interested in these tools to use them as we wait on large scale transition plans of the Blue Box program to full producer responsibility beginning in Niagara on January 1, 2024.

Other Pertinent Reports

Previous updates on recycling container covers and options to reduce windblown litter were presented to the Waste Management Planning Steering Committee on:

- July 7, 2014: WMPSC-C 28-2014;
- June 26, 2017: WMPSC-C 25-2017;
- February 25, 2019: WMPSC-C 11-2019;
- October 28, 2019: WMPSC-C 37-2019; and

- February 22, 2021: WMPSC-C 11-2021

These memos outline the Region's consideration of recycling container cover options; the pros and cons related to these options; and the evaluation regarding recycling carts with lids. The memos also summarize the progression and development of how Niagara Region has addressed the issue of litter; Niagara's blue box lid pilot; and the results of recycling box cover pilots in other municipalities.

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Appendices

Appendix A	Municipalities Currently Using Recycling Blue Box Covers
Appendix B	Municipalities Which Considered Using Recycling Box Covers