
MEMORANDUM

WMPSC-C 11-2021

Subject: Anti-Litter Initiatives – Blue Box Lid

Date: Monday, February 22, 2021

To: Waste Management Planning Steering Committee

From: Lucy McGovern, Collection and Diversion Program Manager

Background

The purpose of this memorandum is to advise members of the Waste Management Planning Steering Committee (WMPSC) of the completed blue box lid trial to support the reduction of litter observed in Niagara Region communities.

The last updates on recycling container lids/covers (lids) and options to reduce windblown litter were presented to the Waste Management Planning Steering Committee on June 26, 2017 (WMPSC-C 25-2017); February 25, 2019 (WMPSC-C 11-2019); and October 28, 2019 (WMPSC-C 37-2019). These memos outline the Region's deliberation of recycling container lid options; the pros and cons related to these options; and the consideration that was made for recycling carts with lids. The memos also summarize the progression and development of how Niagara Region has addressed the issue of litter and introduced the blue box lid trial to support the reduction of litter.

Blue Box Lid Trial

During the first week of November 2019, Region staff distributed one blue recycling box and one locally sourced, vented, plastic recycling box lid, to a total of 349 households in Lincoln, as well as in residential student areas in Thorold. These zones were selected based on resident and Councillor comments and concerns in these known problem litter areas (see Appendix A).

A promotional card accompanied each blue recycling box and lid to promote the use of the provided tools to help reduce litter on their curbside recycling collection day.

Niagara's recycling program is a dual stream program which collects curbside recycling from blue boxes (containers and rigid plastic packaging) and from grey boxes (paper,

cardboard and bundled plastic bags). The promotional card encouraged residents to place the blue recycling box with lid, on top of the grey recycling box at the curb on their collection day to reduce the potential of litter from both boxes. Additional tips to encourage the reduction of litter were also provided on the card (see Appendix B).

To solicit feedback from residents in the trial areas on their experience with the recycling box and lid, the promotional card requested user participation in a short online survey. The survey opened two weeks after residents received their recycling box and lid, and remained open for a period of two weeks. An incentive prize of a \$100 VISA gift card was offered to encourage residents to participate in the survey. A call-in option to respond to the survey by telephone via the Waste Info-Line was also provided, and customer service representatives were provided with a FAQ sheet to support their responses to potential enquiries regarding the lid (see Appendix C).

A limited supply of the vented, rigid, plastic lids were made available at the Region's Recycling Centre for free distribution to any resident that may have enquired about the availability of the lid; however these lids do not necessarily fit the wide variety of recycling boxes in use by all Niagara residents since historically, Niagara Region has purchased recycling containers from a number of different manufacturers through a competitive process. The available lids fit the recycling boxes currently distributed and sold by Niagara Region. Only two residents have requested a recycling box lid since the onset of the trial.

A total of six households (less than two per cent) responded to the survey. A summary of the results are available in Appendix D. Each of the six respondents stated that they used the provided blue box and lid to prevent litter, and reported that the lid and the literature provided helped reduce litter. Three of the respondents previously used clear bags for recycling, and two of these stated that they preferred to use the recycling box and lid because they felt it was more effective than clear bags; while one stated that the lid was more effective than the open box, but not more effective than clear bags.

The respondents previously used a variety of alternative tactics to reduce litter from recycling boxes on windy days. In particular, stacking the recycling boxes on top of one another; and flattening containers placed into the boxes were the most common responses. These were followed up by the next most common responses including the placement of something heavy on top of the recycling boxes to stop the material from blowing out; and delaying placement of recycling boxes at the curb for collection until the next collection week.

Four of the six respondents stated that they would consider purchasing a recycling box lid or cover at retail prices between \$5 and \$10 from local vendors. One of the remaining respondents stated that they would not consider this as they do not have enough recycling to necessitate this purchase; while the other respondent did not offer a reason in their response. General comments from one respondent stated that in order for the recycling box lids to be effective, curbside collection staff would need to place the lid back on, or in, the empty box in order to avoid lost lids; and that clear blue bags or heavier containers like the green bin with lids attached, would be a more secure option for recyclables than the current boxes and lids.

The cost of this initiative was approximately \$3,300 and included the cost of the program boxes and lids, as well as the design and printing of the promotional cards.

With respect to the replacement of lids, the 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. Based on pilots in other municipalities, each contractor noted experiences with lids and covers that became warped/damaged or had been blown away by wind (similar to garbage can lids). 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.

Recycling Box Lid Distribution Area Audits

Region staff visited the 349 homes in the recycling box lid distribution areas for two consecutive weeks in February, 2020 - three months after the initial distribution of the recycling boxes and lids in November, 2019 to determine if residents that received these materials were still using them. A total of 21 per cent (or 72) of the households were using the recycling box and lid in the first week, and 11 per cent (or 39) of the

same households were using the recycling box and lid in the second week. Please refer to Table 1 below for additional audit results.

On each collection day, staff noted observed wind conditions, however windy conditions did not consistently correlate to the presence or absence of observable litter in the trial areas. Other factors seem to have contributed to some of the litter observed by staff such as the improper placement of recycling boxes either on top of, or in front of the snowbanks on the street. In some cases, boxes placed in front of snowbanks were knocked over by vehicles, or minor wind conditions may have toppled boxes from on top of the snowbanks causing the observed litter.

The use of clear bags for recyclables in the audit area remained consistent over each of the two weeks at 11 per cent. Clear bag use for recyclables over the use of boxes may support a reduction in litter on windy days, however the weight of Blue Box recyclables inside the bags are generally not sufficient enough to prevent the blowing of the full bags into the street where they were at times observed to have been struck by oncoming vehicles causing litter. Further, clear bags are not preferred as a collection vessel as they create the potential for increased processing challenges at the recycling centre due to the greater time required to open the bags.

Table 1 – Audit Results of 349 Households in Receipt of a Recycling Box & Lid

Week 1	%	Week 2	%
Homes that set out recycling (264/349)	76%	Homes that set out recycling (222/349)	64%
Homes that used the recycling box lid (72/349)	21%	Homes that used the recycling box lid (39/349)	11%
Homes that stacked their recycling boxes (32/349)	9%	Homes that stacked their recycling boxes (33/349)	9%
Homes that used the recycling box lid <u>and</u> stacked their recycling boxes (17/349)	5%	Homes that used the recycling box lid <u>and</u> stacked their recycling boxes (10/349)	3%
Homes that used clear bags for their recycling (40/349)	11%	Homes that used clear bags for their recycling (37/349)	11%

Week 1	%	Week 2	%
Homes that had overflowing recycling boxes (25/349)	7%	Homes that had overflowing recycling boxes (33/349)	9%

Durham Region Blue Box Lids

In the fall of 2020, the Continuous Improvement Fund and Durham Region provided crumb-rubber blue box lids to 1,000 households in ten sample areas in Durham region. Of these households, curbside audits showed that only six per cent used the provided lids. The low participation rate makes it difficult to determine the relationship between the presence of litter and the use of the recycling box lids.

As part of the audits, litter was also gathered, sorted and weighed over a period of three weeks. It is interesting to note that the composition of the litter collected from all ten areas included in the study had an average of 47.8 per cent acceptable recyclable materials. The majority of the litter was therefore made up of garbage, organics, and other waste that would not be accepted in the blue box.

Review

On October 19, 2020, the Ontario Ministry of Environment, Conservation and Parks introduced a draft regulation under the Resource Recovery and Circular Economy Act, 2016 that will make producers responsible for blue box program operation, including collection, as part of the Province's full producer responsibility framework. Subject to the filing of the new regulation and amendments, Niagara Region cannot confirm that it will be the recycling collection service provider upon the completion of Niagara Region's Blue Box program transition, anticipated to occur in 2024.

Based on the uncertainty of the collection processes after the Blue Box program transition; the results of the municipal blue box lid trials; and the availability of recycling box lids and covers in popular department stores at reasonable prices, Niagara Region will continue to promote the current approach to dealing with wind-blown litter, which includes the following:

- Providing recycling boxes with a larger capacity of 83 litres to minimize the overfilling of recyclables

- Allowing containers with a lid that is clearly marked 'Recycling' as an alternative recycling container; or 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/lids and that these can be purchased at local department stores for a minimal cost
- Reminding residents that there are no limits to the quantity of recyclables that they are allowed to place at the curbside and advising them to consider holding on to their recycling for set out the following week when conditions are more favourable (i.e. not windy)
- 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 and promote anti-litter campaigns

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. Additionally, four municipalities (Fort Erie, Grimsby, Niagara Falls and Pelham) have shown interest in participating in an Anti-Litter Working Group to collectively address the prevention of litter in public outdoor spaces in Niagara, as well as helping to connect residents with local community clean up groups. Staff will keep this Committee up to date on the activities of the Anti-Litter working group as it develops.

Respectfully submitted and signed by

Lucy McGovern
Collection and Diversion Program Manager

Appendices

Appendix A – Program Test Zones

Appendix B – ‘Put a Lid on Litter’ Promotional Card

Appendix C – Recycling Box Lid Cover FAQs

Appendix D – Recycling Box Lid Survey Results