

The Corporation of the City of Kawartha Lakes

Council Report

Report Number WM2018-005

Date: April 10, 2018
Time: 2:00 p.m.
Place: Council Chambers

Ward Community Identifier: All

Subject: Curbside Battery Collection Program

Author Name and Title: David Kerr, Manager Environmental Services

Recommendation(s):

RESOLVED THAT Report WM2018-005, **Curbside Battery Collection**, be received;

THAT Council approve the continuation of the curbside battery collection program annually, with semi-annual collection frequency to occur in the spring and fall; and

THAT the Mayor and Clerk be authorized to execute any documents and agreements with Raw Materials Company Inc. required by the approval of this program.

Department Head:_____

Financial/Legal/HR/Other:_____

Chief Administrative Officer:_____

Background:

The City in cooperation with Miller Waste Systems (Miller) and Raw Materials Company Inc. (RMC) have participated in a curbside used battery collection pilot program during 2016, 2017, and 2018. Council may recall that this pilot program was approved at the October 4, 2016 meeting through the following resolution:

RESOLVED THAT Report WM2016-011, **Curbside Used Battery Collection**, be received;

THAT the continuation of the curbside used battery collection pilot program for 2 years (2017 and 2018) with semi-annual collection frequency to occur in the spring and fall, be approved; and

THAT the Mayor and Clerk be authorized to execute any documents and agreements with Raw Materials Company Inc. required by the approval of this program.

CARRIED

In summary the pilot program has gone very well. Homeowners put out a plastic bag containing their used batteries for collection on top of their green recycling bins on the designated collection days. Miller collects the batteries at each stop along with the regular garbage and recycling. The batteries are placed in 5 gallon pails on the collection vehicles and then are brought back to designated locations where they are removed from the bags and further consolidated into 45 gallon drums that are picked up and transported to RMC's processing facility in Port Colborne, Ontario. The processing facility extracts the metals out of the batteries for use as raw materials for new products.

Four curbside battery collections have occurred in the City since 2016: the pilot collection in the fall of 2016, the spring and fall collections in 2017, and the spring collection in 2018. There is another upcoming collection scheduled in the fall of 2018 which will complete the pilot program.

The numbers of batteries collected and weights collected during the curbside events are presented in the following table:

Curbside Battery Collection Event	Number of 45 Gallon Drums Collected	Weight of Batteries Collected (lbs.)
Fall 2016	9.5	5,745
Spring 2017	12	7,106
Fall 2017	8	5,048
Spring 2018	9	5,500*

*Estimated based on number of drums collected in Spring 2018

In total an estimated 23,399 pounds of used batteries have been collected so far in the curbside program. In 2017 alone, 12,154 pounds of batteries were

collected curbside. In comparison, a total of 20,707 pounds of batteries were collected at both the Fenelon and Lindsay HHW depots for all of 2017. Therefore a year of curbside battery collection captures approximately 37% of the batteries disposed through battery and HHW collection. Even though the curbside battery collection has provided an alternate way for residents to dispose of batteries, the City has not seen a decrease in the amount of batteries collected at the HHW depots. In fact the overall weight of batteries collected has been increasing with time. This is illustrated in the table below:

Year	Batteries collected HHW Depots (lbs.)
2014	13,690
2015	18,220
2016	19,544
2017	20,707

This tells us the ease and convenience of the pilot program is successful in capturing a significant stream of batteries that might otherwise end up going to landfill. The program has been deemed a success as it kept heavy metals such as cadmium, chromium, lead and nickel out of the landfill. These heavy metals are toxic at low concentrations and by preventing them from going into the landfill helps ensure that leachate is cleaner and there is less risk to surface water and groundwater from the landfill. As well, removing the volume of batteries otherwise going to the landfill saves on landfill space and extends site life without expense to the city. Staff recommends continuing running the program around the second week of March and the first week in November to coincide with the time change, which is also advertised as the time to change smoke detector batteries. This time frame seems to be successful at capturing large quantities of batteries as homeowners are already thinking about battery changes.

Based on the success of this pilot program staff presented a recommendation to the Waste Strategy Task force on March 21, 2018 to continue this program on an annual basis. After some discussion the following resolution from the task force was made:

MOVED BY Councillor John Pollard
SECONDED BY Councillor Rob Macklem

RESOLVED THAT the Waste Strategy Task Force supports the staff recommendation to continue the curbside battery collection program annually, with semi-annual collection frequency to occur in the spring and fall.

CARRIED

The following section of this report provides further rationale to support this recommendation.

Rationale:

After the initial successful curbside battery collection in the fall of 2016, The Waste Strategy Task Force recommended the pilot program be extended for 2 additional years; so that there would sufficient information to base long term decisions on regarding whether or not a continued battery collection program is viable. Based on the continued success and high numbers of batteries collected in the program, staff believes the curbside battery program should continue.

Under the current funding model where Stewardship Ontario subsidizes battery collection, de-bagging, supply of collection containers and transportation to the processing site the business case will continue to support the program so that the City will either generate revenue or at the very least break even from a financial perspective. Miller has agreed to provide the collection of the batteries at no cost to the City for the remainder of their contract. Staff also recommends continuing partnering with RMC as they are currently the only company able to offer this type service in Ontario, and the City has had a very positive experience with them to date.

To further support the business case there are definite environmental benefits for keeping batteries and heavy metals out of our landfill sites and surrounding environment. As well waste batteries take up needless space at our landfill sites that could otherwise be used for the public to contain waste materials that are not recyclable.

Other Alternatives Considered:

The City could continue to only provide used battery collection and recycling at the two Household Hazardous Waste (HHW) Depots, located at the Fenelon and Lindsay Ops Landfill sites and scheduled round-up days. However, curbside battery collection has been shown to drastically improve battery recovery and recycling rates without decreasing the quantity received at HHW depots, resulting in an overall increase of the number of batteries diverted from landfill.

Financial/Operation Impacts:

The pilot program is subsidized through Stewardship Ontario and as a result of the large number of batteries collected there was no net cost to the City.

Stewardship Ontario currently funds the program at \$0.3 per pound of batteries collected. The following table outlines the main costs, funding, and overall net profit of the curbside battery collections during the pilot program:

Curbside Battery Collection Event	Cost	Funding	Net Profit
Fall 2016	\$1,839.41	\$1,839.41	\$0.00
Spring 2017	\$1120.00	\$2,119.00	\$999.00
Fall 2017	\$1120.00	\$1,509.57	\$389.57
Spring 2018	\$1120.00	\$1,650.00*	\$530.00*

*Estimated based on number of drums collected in Spring 2018

The initial pilot collection in the fall of 2016 resulted in a \$1,839.41 credit to the City (based on the \$0.3 per pound). The cost for battery bags from the initial collection from RMC was \$0.65/bag and based on 38,000 bags purchased the cost to the municipality was \$2441. Although there was a slight net loss of roughly \$600 (including internal advertising), RMC agreed to subsidize the difference so that the City broke even. Miller has agreed to not charge for the battery collection costs as it is non labour intensive for their staff. City staff expects any future curbside collection contractors would also not charge for this service. However if there was an unexpected cost for this service in the future such as reduction in funding or other unknown reason such as legislative change, staff would then apprise council and assess the merits of continuing the program vs cost and make recommendations regarding whether or not the program should continue.

After the initial curbside battery collection in 2016, the City chose to reduce costs by not ordering additional battery bags, and allowing residents to place their batteries for collection in any sealable plastic bag. Currently the only costs of the program are advertising and staff time spent sorting batteries. The majority of money spent on advertising is on roadside signage which costs an estimated \$750 per collection event. These costs are factored in the above table. The City takes advantage of free press releases, and free waste diversion ads to promote the program in print. Roughly two days of staff time is spent on sorting batteries after each curbside event before RMC picks up the batteries for processing. With advertising and staff time each curbside battery event currently costs around \$1120.00. This cost is balanced by the funding allowing the municipality to realize this program is a revenue source.

In summary, it is likely this initiative will essentially be near break-even from a financial perspective, but the City benefits from additional diversion from landfill. However should the funding model change staff would re-evaluate the program and make recommendations to Council regarding future collection.

Relationship of Recommendation(s) To The 2016-2019 Strategic Plan:

The curbside used battery collection program contributes to both the quality of life and healthy environment goals as outlined in the Council Adopted Strategic Plan. Curbside battery collection will allow residents without access to an HHW

depot the opportunity to recycle their used batteries and will benefit the environment by keeping hazardous waste out of landfills.

Consultations:

Waste Strategy Task Force
Raw Materials Company (RMC) Inc.
Miller Waste Systems
Communications, Advertising and Marketing Officer

Attachments:

None.

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Department Head: Bryan Robinson