

The Corporation of the City of Kawartha Lakes
Council Report

Report Number WM2019-009

Date: July 16, 2019
Time: 1:00 p.m.
Place: Council Chambers

Ward Community Identifier: All

Title: Mattress Recycling Pilot Results and Recommendations

Description: An update for Council on the mattress recycling pilot and recommendations to make it a permanent program.

Author and Title: David Kerr, Manager Environmental Services

Recommendation(s):

That Report WM2019-009, **Mattress Recycling Pilot Results and Recommendations**, be received; and

That Council approves the mattress recycling program as outlined in this report to continue on a permanent basis; with an operating budget for 2020 of \$76,500.

Department Head: _____

Financial/Legal/HR/Other: _____

Chief Administrative Officer: _____

Background:

At the Council Meeting of November 14, 2019 Council adopted the following resolution:

CR2017-977

Moved By Councillor James

Seconded By Councillor Veale

Resolved That Report WM 2017-009, **Pilot Mattress Recycling Program**, be received;

That Council approve the implementation of a Mattress Recycling program as a 19 month pilot to start June 1, 2018 and end on December 31, 2019 as outlined in this report WM 2017-009 at a cost of \$72,600.00 for 2018 and \$124,500.00 for 2019; and

That staff report back to Council on the success of the mattress recycling pilot program by July 31, 2019 with future program recommendations and 2020 budget expectations.

Carried

This report addresses that direction.

On November 14, 2017 staff brought a report to council with recommendations to begin a mattress recycling pilot program to begin in 2018 and end on December 31, 2019. In the Integrated Waste Management Strategy as approved by council it is recommended that the City implement a mattress recycling program in 2019. As part of the background research, it was determined that the cost savings through deferring the closure of the landfill by saving space realized with the implementation of a mattress recycling program are significant and would more than pay for the program costs. Mattresses also do not compact in landfills and the springs get caught up in the landfill equipment which increases maintenance costs. Therefore, staff recommended that this diversion effort be implemented as a pilot program starting June 1, 2018.

A request for quotation for a mattress recycling contractor was sent out in early 2018 and the City entered into a contract with Recyc Mattress Inc. for the duration of the pilot program with the option for two one-year extensions. The pilot program began later than anticipated in September of 2018 due to some unanticipated necessary modifications needed to be made to the saw tooth drop off area to better facilitate the drop-off and loading of mattresses into a trailer.

Since the majority of the mattresses are received at the Lindsay Ops landfill, and it was the only large site that had the space to store the mattresses for recycling the pilot took place only at the Lindsay Ops landfill. In the interim mattresses were still accepted for disposal at the other four landfill sites. Alternatively, residents were able to purchase a mattress sticker at \$15.00/mattress and set their mattress(es) items out for collection at the curb for collection by Miller similar to the bulky waste program. Mattresses put out through curbside collection were then picked up delivered to the Lindsay Ops landfill for recycling. The contractor picking up the mattresses at Lindsay Ops and transporting them to the processing site charges the city \$17/mattress.

Rationale:

The mattress recycling pilot has been very successful so far. From September 2018 to May 2019, 2098 mattresses were recycled. The public have been very receptive and there have been no issues with the public or the mattress recycler.

The 2098 mattresses recycled have saved approximately 1363.70m³ of landfill space (0.65m³ per mattress). In general this space could hold 954.59 tonnes of normal residential waste compacted to 0.700kg/m³. This is the average compaction for most residential waste. Based on previous reports prepared for the City Landfill space is valued at \$150 per tonne. Therefore there has been a savings of \$143,188.50 in landfill space.

It is estimated that the City will receive approximately 4000 mattresses per year to be recycled. This equates to 2600m³ of air space saved which would allow on average 1820 tonnes of residential waste. This is valued at an annual savings of \$273,000 per year in deferred landfill space.

Due to the success of the pilot program, staff recommends making the program permanent. Staff will continue to accept mattresses at the other landfill sites as waste, but plan to review the feasibility expansion of the mattress recycling program to other landfills. This will be reviewed as a goal in the Integrated Waste Management Strategy Update which will be brought to council for approval in November of 2019 for waste management initiatives over the next five years. Also increased public education with information to residents to place their mattress curbside or bring the mattress to Lindsay Ops to be recycled should increase the capture rate of mattresses that currently may be going to the other sites to be landfilled.

Staff has consulted with the Waste Management Advisory Committee, the Lindsay Ops Landfill Public Review Committee, and the Fenelon Landfill Public Review Committee regarding making the pilot program permanent and all committees have been supportive of this recommendation.

At the Waste Management Advisory Committee meeting on May 8, 2019 the following resolution was made:

Moved By Councillor Veale
Seconded By Councillor Ashmore

RESOLVED THAT the Committee support the staff recommendation to continue the Mattress Recycling program as a permanent program; and

THAT options for a city-wide program be explored.

Carried

At the Lindsay Ops Landfill Public Review Committee meeting on June 12, 2019 the following resolution was made:

Moved By Councillor Dunn
Seconded By Chris Appleton

Resolved That the Lindsay Ops Landfill Public Review Committee supports the staff recommendation to continue the Mattress Recycling program as a permanent program; and

That options for a city-wide program be explored.

Carried

At the Fenelon Landfill Public Review Committee meeting on May 23, 2019 the following resolution was made:

Resolved That the Fenelon Landfill Public Review Committee supports moving beyond the pilot project and implementing mattress recycling as a permanent program.

Moved By Robert Coleman
Seconded By Julia Taylor

Carried

Other Alternatives Considered:

Council could choose to amend the Consolidated Fees Bylaw 2018-234 to increase the price charged to the public to recycle or dispose of a mattress from \$15.00 to \$17.00. This would cover all of the costs of recycling mattresses that is currently spent on contract costs. However this would put more of a burden on residents and may deter them from disposing of mattresses properly.

Council could also choose to cancel the pilot; however there would be a deferred loss in landfill space and associated significant cost implication. Staff recommends that the City continue to lead by example in diverting mattresses from the landfill in order to save landfill space and extend landfill life.

Financial/Operation Impacts:

With an annual estimate of 4,000 mattresses being recycled this equates to a value of approximately \$273,000 of savings per year in landfill space. The contract costs per year are an estimated \$68,000 and therefore there is a total cost savings of \$205,000 per year. Staff will budget \$76,500 in 2020 for mattress recycling to add a contingency of 500 mattresses.

	Sept 2018 to May 2019	Annual estimate
Number of Mattresses Recycled	2098	4000
Contract Cost	\$35,666.00	\$68,000.00
Landfill Space Saved (m3)	1363.7	2600
Tonnes Saved	100	190.66
Tonnes of Space Saved at residential compaction rate of 0.7	954.59	1820
Value of Space Saved	-\$143,188.50	-\$273,000.00

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

This report contributes to the Council Adopted Strategic Plan, namely Strategic Action 3.1.2 which is “Executing the Waste Management Strategy”. This report aligns with the City’s Integrated Waste Management Strategy to divert materials from landfill and find further recycling opportunities to save landfill space.

Also, the proposed pilot mattress recycling program aligns with Goal #3 of a “Healthy Environment”. The act of mattress diversion aligns with the City’s vision of a naturally beautiful community that protects our local environment, enhances water quality and creates an improved quality of life.

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Department Head: Bryan Robinson