



City of  
**Peterborough**

---

**To: Members of the Waste Management Steering Committee**

**From: W. H. Jackson, Director of Utility Services**

**Meeting Date: March 3, 2014**

**Subject: Report WMC14-003  
Mattress and Box Spring Recycling Program – Implementation  
Plan**

---

## **Purpose**

A report to recommend the implementation of a full-scale mattress and box spring recycling program at the Peterborough County/City Waste Management Facility (PCCWMF).

## **Recommendation**

That the Waste Management Committee endorse the recommendation as outlined in Report WMC14-003 dated March 3, 2014 of the Director of Utility Services as follows:

That the implementation of a mattress and box spring recycling program commence September 2, 2014 at the Peterborough County/City Waste Management Facility, as detailed in the “Recommended Next Steps” section of Report WMC14-003.

## **Budget and Financial Implications**

Extrapolating the costs to run a six-week mattress and box spring recycling pilot in 2013, it is anticipated that the gross cost to recycle these items would be in the neighbourhood of \$180,000 annually shared equally by the City and County.

Similar to the fee-per-unit charge for Freon containing appliances, a fee-per-unit charge for mattresses and box springs would help offset the cost of recycling. A charge of \$10.00 per unit is recommended. Implementation of this fee would reduce the expected annual cost to \$73,000. The 2015 PCCWMP budget will be increased to account for this additional expense.

The prorated 2014 net cost is estimated to be in the order of \$25,000. The year end “true-up” will include this additional cost.

Off-setting these operating costs are the significant savings in air space that would be realized by this program. Each mattress or box spring is on average  $\frac{3}{4}$  of a cubic meter in size. They will ultimately compact to 40% of their original size once land filled, depending upon the weight and height of material land filled above it. This brings their land filled volume down to approximately  $\frac{1}{3}$  of a cubic meter. Recent estimates have established the value of a cubic meter of landfill space at \$33.48. Accordingly, while the net cost to recycle each mattress would be \$6.70, it costs, at a minimum, \$10 to land fill that same mattress.

## **Background**

### **Previous Developments**

After a six-week mattress and box spring recycling pilot, the Waste Management Committee at its meeting of November 18, 2013 in considering Report WMC13-019 “Mattress Recycling Pilot – Results and Recommended Next Steps” endorsed the following:

- a) That the Waste Management Committee support in principle the expansion of the mattress recycling pilot to a full-scale program;
- b) That the general public and all waste haulers and retailers known to bring mattresses to the landfill be notified of the Waste Management Committee’s intention to introduce a mattress and box spring user charge and that the issue will be discussed at the January 20, 2014 Waste Management Committee meeting.

This discussion was postponed until the March 3, 2014 WMC meeting, as it was felt the initial notices to haulers and retailers may have become lost or forgotten over the busy holiday season.

Notices were once again distributed on January 22, 2014. A total of sixty-two letters were sent to potential generators of the waste in question, including retailers, institutions, and community housing corporations. Another version of the notice was sent to the six local waste haulers who use the PCCWMP. Ads were placed in Peterborough This Week and the Examiner on January 29 and 30, 2014.

## Feedback on Public Notice

A number of potential issues were highlighted by the six townships which responded as detailed in Appendix A. The main issues brought forward by the townships were:

- Limited space at some transfer stations for an additional bin
- Do not have the necessary Environmental Compliance Approvals from the MOE for separating mattresses; challenging process to acquire these
- Concerns about increases in roadside dumping in the County
- Additional costs to implement (proper storage, recycling charge)
- Adequate time needed for Townships to advise politicians, investigate options and potential costs, review operational impacts, implement ECA amendments, as well as adjust budgets, send notifications, and develop resident education systems.

Two responses were received from the business community. One, from a waste hauler who agreed in principal with the concept of diverting mattresses from landfill but, took issue with the suggestion that they would be held financially responsible (through fines) if they brought banned mattresses to the tip face. Another City retailer contemplated alternatives but ultimately determined that they will continue coming to the landfill and paying the recycling fee.

## Recommended Next Steps

In consideration of the responses received and the success of the pilot project, it is proposed that:

- I. A full-scale mattress and recycling program begin on September 2, 2014, pending approval from the County and City Councils;
- II. The Township transfer stations be allowed until September 7, 2015 to implement the mattress and box-spring recycling program due to the significant issues some of them need to work through;
- III. The PCCWMF Disposal By-Law (07-027) be amended to include 'clean and dry mattresses and box springs' as banned materials at the facility;
- IV. A charge of \$10 per unit be levied for each mattresses and/or box spring at the PCCWMF; and
- V. Haulers found to have mattresses or box springs in mixed loads going to the tip face be issued warnings and fines, as is done for all other banned materials.

The proposed timing of the next steps is as follows:

Mattress and Box Spring Implementation Schedule		
1. Reports to Councils/By-Law Amendment	March 19, 2014 (County)	April 7, 2014 (City)
Assuming Councils' Approvals Received		
2. Establish Formal Agreement with Tomlinson	April 15 – June 15, 2014	

### **Mattress and Box Spring Implementation Schedule**

3. Promotion and Education Campaign	May 1 – September 30, 2014
4. Send written Notifications to affected parties	May 1, 2014
5. Make necessary changes to Tracker software	May 1, 2014
6. Implement Program and Begin Charging Fees	September 2, 2014
7. Township compliance date	September 7, 2015

Once the promotion and education campaign begins, it is possible that some people may wish to “do the right thing” and recycle their mattresses/box springs along with paying the \$10 per unit fee. Although there will be no enforcement protocol in place until September 2, 2014, staff will be receptive to this situation.

## **Summary**

Results of the 6-week pilot indicated there would be significant value in implementing a full-scale mattress recycling program. The City’s Waste Management Master Plan also identified this initiative as having the potential to divert 5% to 8% of the waste stream (by weight). More important than weight is the savings in landfill space that could be achieved. If 10,000 or more mattresses can be diverted each year from the tip face, this equates to at least 3000 cubic meters of landfill space saved, or about 1.70 years of additional landfill life at our current location. There appears to be minimal resistance to the proposed program based on the number and nature of responses to notifications and advertisements.

Submitted by,

W. H. Jackson, P.Eng.  
Director, Utility Services Department

Contact Name:  
Virginia A. Swinson, B.Sc.  
Waste Diversion Section Manager  
Phone: 705-742-7777 Ext. 1725  
Toll Free: 1-855-738-3755  
Fax: 705-876-4621  
E-mail: [vswinson@peterborough.ca](mailto:vswinson@peterborough.ca)

Attachment:  
Appendix A - Township Feedback on Mattress Recycling program at PCCWMF