

JUL 18 2016

File: CR-12-01  
Ref: SD 2016 Jun 24

The Honourable Mary Polak  
Minister of Environment  
PO Box 9047, Stn Prov Govt  
Victoria, BC V8W 9E2  
VIA EMAIL: [env.minister@gov.bc.ca](mailto:env.minister@gov.bc.ca)

Dear Minister Polak:

**Re: Mattress and Bulky Furniture Extended Producer Responsibility**

At its June 24, 2016 regular meeting, the Board of Directors of the Greater Vancouver Sewerage and Drainage District ('Metro Vancouver') considered a report on issues related to mattress recycling and disposal in the Metro Vancouver region and adopted the following resolution:

*That the GVS&DD Board:*

- a) *write a letter to the Minister of Environment requesting an amendment to the B.C. Recycling Regulation to require the implementation of an Extended Producer Responsibility (EPR) program for mattresses and other bulky furniture by 2017; and*
- b) *copy all municipalities and regional districts in the Province on the letter.*

The Province of B.C. has been a leader in implementing extended producer responsibility (EPR) programs for a broad range of products, including most recently packaging and printed paper, has improved the management of many products in British Columbia. Responsibility for recycling these products has been shifted from municipalities to producers, convenient systems have been put in place for recycling of materials that may create negative environmental impact, and producers are now considering the full-life cycle impacts of their products by implementing design changes.

Building upon the success of current EPR programs, Metro Vancouver believes that it is important to move forward with the implementation of EPR programs for mattresses and bulky furniture. Mattresses and other furniture are specifically identified in the Canadian Council for Ministers of the Environment Canada-Wide Action Plan for EPR as targets for new EPR programs by 2017. The Ministry of Environment has previously communicated its intent to implement EPR programs for mattresses and bulky furniture by 2017.

An estimated 165,000 mattresses are recycled each year in the Metro Vancouver region, of which approximately 60,000 are handled at Metro Vancouver transfer stations. An additional 32,000 mattresses and 59,000 bulky furniture items are picked up by municipalities, either through illegal dumping clean-up programs or large item pick-up programs. Recycling generates significant energy

savings and greenhouse gas benefits, but at significant cost to taxpayers. Metro Vancouver estimates the cost to regional taxpayers of illegal dumping clean-up and bulky items pick-up programs for mattresses and bulky furniture to be as high as \$5,000,000 per year.

Establishing an EPR program for mattresses and bulky furniture would result in a number of benefits:

1. The cost for collection and recycling of mattresses and bulky furniture would be incorporated into the price of the items rather than being funded by municipal taxpayers.
2. Variability in commodity markets would not impact the potential for recycling mattresses.
3. Mattress production could be changed or alternatively innovative recycling systems could be implemented to manage hard-to-recycle products such as pocket-coil mattresses
4. Mattresses could be recycled by businesses and residents free of charge, reducing the potential for illegal dumping

Within the last year or so, new mattress EPR programs have launched in California, Connecticut and Rhode Island. Given a common pool of mattress and bulky furniture brand owners operating in the United States and Canada, this is a key time to begin moving forward to include these product categories in the *B.C. Recycling Regulation*.

We thank you in advance for your consideration of this request. We would be pleased to discuss how we can work together as partners to facilitate the implementation of this and other EPR programs. Please feel free to contact me to discuss further, or have your staff contact Andrew Doi of the Solid Waste Services Department.

Yours truly,



Greg Moore  
Chair, Metro Vancouver Board

GM/PH/sw

cc: All Municipalities and Regional Districts in the Province of BC

Encl: "Mattress Recycling Update" Report to GVS&DD Board dated June 24, 2016 (Doc# 17939528)

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To: Zero Waste Committee

From: Sarah Wellman, Senior Engineer, Solid Waste Services

Date: May 26, 2016 Meeting Date: June 9, 2016

Subject: **Mattress Recycling Update**

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### **RECOMMENDATION**

That the GVS&DD Board:

- a) write a letter to the Minister of Environment requesting an amendment to the B.C. Recycling Regulation to require the implementation of an Extended Producer Responsibility (EPR) program for mattresses and other bulky furniture by 2017; and
- b) copy all municipalities and regional districts in the Province on the letter.

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### **PURPOSE**

The purpose of this report is to update the Greater Vancouver Sewerage and Drainage District ('Metro Vancouver') Board on issues related to mattress recycling in the region and seek direction to write the Minister of the Environment to request that the Province implement an EPR program for mattresses and other bulky furniture.

### **BACKGROUND**

At its April 27, 2012 meeting, the GVS&DD Board adopted the following resolution:

*That the Board request the Chair to send a letter to the Provincial Government highlighting the importance of implementing an Extended Producer Responsibility program for mattresses and other large furniture items.*

The Board Chair's letter is attached (Attachment 1) along with the response from the Ministry of Environment (Attachment 2).

In 2014, Maple Ridge submitted the following UBCM resolution requesting an EPR program for mattresses:

#### **2014 B97: Maple Ridge**

WHEREAS the Province is transitioning responsibility for end-of-life management of goods to industry through the use of product stewardship program as governed by the BC Ministry of Environment Recycling Regulation;

AND WHEREAS there is currently no product stewardship program for used mattresses and improperly discarded mattresses have to be disposed of by local government at taxpayers expense:

THEREFORE BE IT RESOLVED that UBCM request the provincial government to require industry to develop a product stewardship program to adequately address end-of-life management of waste mattresses.

This resolution was endorsed by UBCM, and received the following response from the Ministry of Environment:

The Ministry of Environment supports UBCM's request to include waste mattresses under future product stewardship programs to ensure the costs associated with managing these commonly discarded products are transferred to the producers responsible. In fact, the Ministry has committed to meeting the targets set out in the Canadian Council of Ministers of the Environment's (CCME) Canada-wide Action Plan for Extended Producer Responsibility (EPR) programs – including those for construction and demolition materials, furniture (including mattresses, hide-a-beds, etc.), textiles, carpets and appliances by 2017. BC continues to lead all jurisdictions in this regard. Continued efforts in the Lower Mainland to collect and recycle these items are encouraged as they will not only support waste diversion, but will help establish this industry as a proven entity and inform future consultations regarding the upcoming EPR program for mattresses.

An estimated 160,000 to 170,000 mattresses are recycled each year in the Metro Vancouver region, of which approximately 60,000 are handled at Metro Vancouver transfer stations with the remainder delivered directly to the mattress recyclers either by private industry, private pick up services, or by municipalities that offer collection services and/or pick up illegally dumped mattresses.

In 2011, the *Tipping Fee and Solid Waste Disposal Regulation Bylaw* (Tipping Fee Bylaw) was changed to ban mattresses from disposal due to operational impacts and to encourage mattress recycling. Mattresses are received at Metro Vancouver transfer stations for \$15 per unit to pay for the cost of recycling the mattresses.

Due to challenges recycling pocket coil mattress springs, in 2015, the Tipping Fee Bylaw was amended to provide a \$25 discount per tonne at the Waste-to-Energy Facility for loads containing more than 85% metal in recognition of the value of the metal in loads, and also to help reduce costs for mattress recyclers with no recycling alternative for these pocket coil springs.

At the September 10, 2015 Zero Waste Committee directed staff to report back to the Committee on:

*the effectiveness of the mattress surcharge*

#### **MATTRESS AND OTHER BULKY FURNITURE DISPOSAL AND RECYCLING**

The past practice of disposing of mattresses commingled in the waste stream was operationally challenging due to the bulkiness of mattresses, which makes them difficult to handle during waste pickup and transport. Their low density makes them undesirable landfill material, and the springs have a tendency to impact landfill and transfer station equipment (e.g. puncture hydraulic systems). Removal of mattresses from the waste stream has helped reduce maintenance on transfer station and landfill equipment.

The majority of the mattresses collected at transfer stations are recycled. In mattress recycling there are secondary markets for the steel of the innerspring unit, the polyurethane foam, the cover (toppers), the cotton, and the wood. According to the May 2012 CalRecycle Study “Mattress and Box Spring Case Study: The Potential Impacts of Extended Producer Responsibility in California on Global Greenhouse Gas (GHG) Emissions”, mattress and box spring recycling and component reuse generates significant energy and greenhouse gas benefits.

Pocket coils are difficult to recycle, as it is challenging to separate the metal from the fabric. Metro Vancouver is currently accepting pocket coil mattresses at the Waste-to-Energy Facility, and recovers the metal for recycling.

Up until recently, there were three private companies in the region recycling over 160,000 mattresses. Metro Vancouver’s disposal ban on mattresses has been key in the development of this industry. With declining metal prices mattress recycling companies have faced economic challenges because historically metal was the primary revenue source from recycling mattresses.

As of May 2016, one of the recycling companies, Recyc-Mattress, stopped accepting mattresses. Without an EPR program in place for mattresses, the net costs for mattress recycling must be charged to residents, businesses and the public sector dropping off mattresses for recycling. Over the last two years, Metro Vancouver’s drop-off costs at the private recycling facilities have increased from \$9 to \$13 per unit. Metro Vancouver has maintained drop-off fees at \$15 at transfer stations despite the increased recycling costs to reduce the potential for illegal dumping.

With the temporary closure of Recyc-Mattress, there have been more discarded mattresses than the local capacity for recycling. As a result, Metro Vancouver is temporarily stock-piling some mattresses, and may need to send some mattresses to landfill. This issue highlights the need for an EPR program for mattresses to stabilize the recycling capacity in the region regardless of commodity prices.

Other bulky furniture such as couches are recyclable in the same manner as mattresses, and these products are also a challenge from a disposal perspective due to their bulk and the presence of springs. The cost of recycling couches is approximately \$30 – \$45 per unit. If an EPR program for mattresses and bulky furniture was put in place, couches and other bulky furniture could be banned from disposal, dramatically increasing recycling of these products and reducing impacts on the disposal system.

### **Illegal Dumping**

Illegal dumping is an ongoing concern in the region. It causes environmental, health and social impacts, and is a considerable resource and financial burden on governments, businesses and residents. In particular, municipalities often bear the majority of costs associated with reactively cleaning up and disposing of abandoned waste.

Despite the availability of recycling programs provided by Metro Vancouver and the private sector, illegal dumping of mattresses is common in the region.

The resident’s principal barriers to mattress recycling in the region include:

- difficulty and cost of transporting mattresses to transfer stations or appropriate recyclers,
- recycling fee charged when a customer drops off a mattress, and

These barriers contribute to continued incidents of illegal dumping in many member municipalities.

An estimated 10,000 mattresses and 16,000 other pieces of large furniture are abandoned each year in the region with an average municipal unit cost for collection of \$50 per unit (includes labour, and transportation), which leads to a cost of approximately \$1,300,000 per year for member municipalities.

Anecdotally, the highest portion of abandoned mattresses occur in urbanized areas with a transient population near apartment complexes or multi-family dwellings. In these areas, many residents do not own vehicles, rely solely on public transportation, or own small vehicles not suitable for transporting large and bulky mattresses.

It is uncertain as to the relative impact of recycling fees compared to transportation barriers in determining the number of illegally dumped mattresses. Drop-off revenues for mattresses at Metro Vancouver and City of Vancouver transfer stations equal approximately \$900,000 per year, and cover most of the cost of recycling these mattresses. Reduction or elimination of these fees is unlikely to eliminate illegal dumping and as such reduction or elimination of fees would result in a net cost. Drop-off fees could be eliminated if an EPR program for mattresses is put in place.

### **Large Item Pick-Up Programs in the Region**

Many municipalities have implemented large item pick-up programs as a way to reduce incidents of illegal dumping. These programs are generally available only to residences served by municipal garbage collection. There are a combination of various features in member municipalities' programs, including the types of materials collected, pick-up limits, housing types serviced, collection frequency, collection fee, etc. Approximately 22,000 mattresses and 43,000 pieces of furniture are picked up through large item pick-up programs each year.

### **EPR Program for Mattresses**

There is urgent need for an EPR program for mattresses and other bulky furniture in the region. Lack of an EPR program increases the potential for illegal dumping of these items and transfers costs to municipalities that must pick-up illegally dumped items. In many cases municipalities incur additional costs by offering large item pick-up programs at no cost to residents to reduce the potential for illegal dumping. Recent changes to commodity markets have reduced the economic viability of local mattress recycling businesses and may result in the requirement to landfill recyclable mattresses. The Ministry of Environment has previously communicated that they targeted implementing an EPR program for mattresses and bulky furniture by 2017. The typical timeframe for EPR programs to be implemented following a change to the Recycling Regulation is approximately 18 months, and as such, even if a change to the Recycling Regulation is made in 2016, it could be 2018 before a program is in place. It is important to highlight to the Ministry of Environment the urgent need to proceed with an EPR program for mattresses and other bulky furniture.

## **ALTERNATIVES**

1. That the GVS&DD Board:

- a) write a letter to the Minister of Environment requesting an amendment to the B.C. Recycling Regulation to require the implementation of an Extended Producer Responsibility (EPR) program for mattresses and other bulky furniture by 2017; and
- b) copy all municipalities and regional districts in the Province on the letter.

2. That the Zero Waste Committee receive the report titled “Mattress Recycling Update”, dated May 26, 2016 for information and provide alternate direction to staff.

### **FINANCIAL IMPLICATIONS**

If the Board approves Alternative 1, correspondence will be sent to the Minister of Environment to advocate for an EPR program for mattresses and other bulky furniture.

### **SUMMARY/CONCLUSION**

An estimated 160,000 to 170,000 mattresses are recycled each year in the Metro Vancouver region, of which approximately 60,000 are handled at Metro Vancouver transfer stations. Mattress recycling generates significant energy and greenhouse gas benefits, and reduces Metro Vancouver’s operational and maintenance costs when compared to disposal. A mattress recycling fee is collected by Metro Vancouver at the transfer stations, and paid to mattress recyclers to help cover the cost of dismantling and recycling mattress components.

Many municipalities have developed large item pick-up programs to reduce the incidences and costs associated with illegal dumping.

An EPR program for mattresses and bulky furniture is urgently needed, as changes to commodity markets have reduced the economic viability of local recycling businesses and may result in the requirement to landfill potentially recyclable mattresses. Lack of an EPR program increases the potential for illegal dumping of these products and transfers costs to municipalities. There is a need to continue to urge the Minister of Environment to address this ongoing issue and to introduce an EPR program for mattresses and other bulky furniture and therefore staff recommend Alternative 1.

### **Attachments and References:**

Attachment 1: Letter from Chair Moore to Minister Terry Lake, dated June 19, 2012

Attachment 2: Letter from Minister Terry Lake to Chair Moore, dated December 11, 2012



**metro**vancouver

Territorial Municipality of Metro Vancouver • Greater Vancouver Water District

Vancouver Sewerage and Drainage District • Metro Vancouver Housing Corporation

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File: CR-24-03-EPR  
RT: 3960

JUN 19 2012

The Honourable Terry Lake  
Minister of Environment  
PO Box 9047, Stn Prov Govt  
Victoria, BC V8W 9E2

Dear Minister ~~Lake~~: *TERRY*

**Re: Acceleration of an Extended Producer Responsibility (EPR) Program for Mattresses and Large Upholstered Furniture**

As part of the Canadian Council of Ministers of the Environment (CCME) Canada-wide Action Plan for EPR, all provinces committed to implementing a program for furniture, including mattresses, by the Phase II target of 2017.

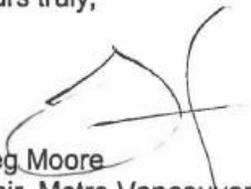
The leadership demonstrated by the Province, Metro Vancouver and others, has created a robust recycling industry for mattresses and large upholstered furniture, with three processors located in the Lower Mainland. With the recent emergence of this local recycling industry, Metro Vancouver implemented a ban on the disposal of mattresses at regional disposal facilities in January 2011. A \$20 per mattress fee was charged to cover the costs of collection, transportation and processing. In 2011, over 125,000 mattresses were recycled into their wood, metal, foam, and fibre components, leading to over 70 green jobs added in this recycling sector. These valuable natural resources were reused and/or recycled thereby avoiding the disposal of these materials in landfills and the extraction of new natural resources.

While this initiative has been an overwhelming success from an environmental perspective, the combination of the ban and the \$20 per unit fee has resulted in the unintended consequence of illegal dumping by a minority of individuals unwilling to pay a fee for responsible management of products at the end of their useful life. As a result, municipalities incur significant costs to responsibly manage these products, as opposed to the manufacturers, producers, distributors and retailers who do not currently bear the full environmental cost to manage their products.

We ask that the Ministry of Environment amend the Recycling Regulation to include mattresses and large upholstered furniture and accelerate the implementation of this EPR program to 2015. This request to accelerate EPR implementation is explicitly stated in action 1.1.10 of our Integrated Solid Waste and Resource Management Plan which was approved last year. The infrastructure and regulatory structure already exists in Metro Vancouver and could be easily extended throughout the Province.

We thank you in advance for your kind consideration of this request. We would be pleased to discuss how we can work together as partners to facilitate the acceleration of this and other EPR programs. Please feel free to contact me to discuss this matter further, or have your staff contact Andrew Doi, Environmental Planner, at 604-436-6825.

Yours truly,



Greg Moore  
Chair, Metro Vancouver Board

GM/PH/ad



Reference: 171883

DEC 11 2012

Greg Moore, Chair  
and Directors  
Metro Vancouver Board  
4330 Kingsway  
Burnaby BC V5H 4G8

Dear Chair Moore and Directors:

Thank you for your letter of June 19, 2012, regarding the acceleration of an extended producer responsibility (EPR) program for mattresses and large upholstered furniture in British Columbia (BC). I apologize for the delay in responding.

As you may know, BC has recently been recognized for its leadership position on EPR. BC has more EPR programs than any jurisdiction in Canada and is further advanced towards fulfilling its Canadian Council of Ministers of Environment Canada-wide Action Plan (CAP) for EPR.

A date for the addition of mattresses and large upholstered furniture to the Recycling Regulation has not been set at this point in time. Ministry of Environment staff are currently actively engaged on the implementation of the packaging and printed paper product category under the Recycling Regulation. Further product additions to the Regulation will be addressed in priority sequence.

The Ministry's 2011/12 – 2013/14 Service Plan highlights our commitment to the CAP for EPR. The CAP recommends that EPR programs be implemented by 2017 for construction and demolition materials, furniture, textiles, carpets and appliances, including ozone-depleting substances. We are making every effort to meet these 2017 targets, and I would like to assure you that mattresses and large upholstered furniture will be included in future discussions.

I would like to acknowledge and commend Metro Vancouver for extending, as documented in action 1.1.3 under Goal 1 of the Metro Vancouver Integrated Solid Waste and Resource Management Plan, the offer to provide staffing support and partner with the Ministry to help advance EPR in the province. This offer of support has the potential to assist in steering waste diversion activities in a manner that will ultimately eliminate waste or effectively manage it as a resource.

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I see the recent Memorandum of Understanding (MOU) on EPR between Metro Vancouver and the Ministry as a promising start to Metro Vancouver's commitment to advance EPR in collaboration with the Province and I encourage the use of the MOU as the mechanism to capture opportunities where Metro Vancouver and the Province can work together to develop new EPR programs.

If you have any further suggestions for the development of EPR programs, or any questions about the content of this letter, please do not hesitate to contact Ms. Meegan Armstrong, Head of Industry Product Stewardship in the Ministry of Environment, at 250 387-9944 or by email at [Meegan.Armstrong@gov.bc.ca](mailto:Meegan.Armstrong@gov.bc.ca).

Thank you again for writing.

Sincerely,

A handwritten signature in black ink, appearing to read "Terry Lake". The signature is fluid and cursive, with a large initial "T" and "L".

Terry Lake  
Minister of Environment