# **A11**



# ADMINISTRATIVE REPORT

Report Date: December 5, 2011 Contact: Chris Underwood Contact No.: 604.873.7992

RTS No.: 9372

VanRIMS No.: 08-2000-20

Meeting Date: December 13, 2011

TO: Vancouver City Council

FROM: General Manager of Engineering Services

SUBJECT: 2012 Solid Waste Utility (SWU) Fees and By-law Changes

# **RECOMMENDATION**

A. (i) THAT, for properties that receive garbage cart collection service, the 2012 annual garbage collection fees be established as follows:

| Cart Size  | 2012 Fee |
|------------|----------|
| 75 litres  | \$99     |
| 120 litres | \$117    |
| 180 litres | \$142    |
| 240 litres | \$166    |
| 360 litres | \$216    |

- (i) THAT, for properties that receive garbage can collection service, the 2012 annual garbage collection fees be established at \$67 for each collection point and \$42 for each garbage can allocated or purchased.
- (ii) THAT the 2012 annual recycling collection fees for each dwelling unit be increased by \$1 to \$32, except where one or more common collection points at locations agreed to by the City Engineer are serviced, be increased by \$1 to \$24 for each dwelling unit and the rate for each collection point remain at \$8.
- (iii) THAT the 2012 annual compostables collection fees remain as follows:

| 2012 Fee |
|----------|
| \$46     |
| \$54     |
| \$61     |
| \$75     |
|          |

(iv) THAT the 2012 annual fee for storage of recycling carts on City streets and lanes be increased by \$1.40 to \$71.40/cart.

- B. THAT the 2012 garbage disposal fee at the Vancouver Landfill and Vancouver South Transfer Station be established at \$107/tonne to align with the Metro Vancouver 2012 Tipping Fee and Solid Waste Disposal Regulation Bylaw.
- C. THAT the 2012 fee for demolition materials dropped off at the Vancouver Landfill in volumes greater than 50 cubic metres per load be established at \$40/tonne, effective March 1, 2012 to encourage recycling opportunities.
- D. THAT a surcharge on loads of asbestos dropped off at the Vancouver Landfill, with the exception of residential loads of 10 bags or less, be established at \$50/tonne as of March 1, 2012 to recover actual costs for managing this waste.
- E. THAT the 2012 fee for mattresses dropped off for recycling at the Vancouver Landfill and Vancouver South Transfer Station be reduced to \$15/unit to match actual recycling costs and encourage responsible management of mattresses.
- F. THAT the materials prohibited from disposal in garbage containers and at the Vancouver South Transfer Station and Vancouver Landfill be updated to include new Product Stewardship Program materials.
- G. THAT \$50 per load may be assessed on garbage loads disposed at the Vancouver Landfill and Vancouver South Transfer Station containing one or more Product Stewardship Program (Extended Producer Responsibility) materials to align with the Metro Vancouver 2012 Tipping Fee and Solid Waste Disposal Regulation Bylaw.
- H. THAT the customers included in the pilot program testing expansion of food scraps collection, approximately 2,000 single-family homes, be billed 2012 garbage and compostables fees based on the number and size of garbage and compostables carts in use in September 2011 prior to the start of the pilot.
- I. THAT the Director of Legal Services be instructed to bring forward for enactment the revisions to the Solid Waste By-law substantially as referred to in these Recommendations and as substantially set out in Appendix B.

### REPORT SUMMARY

The purpose of this report is to obtain Council authority to set 2012 Solid Waste Utility (SWU) fees and amend the Solid Waste By-law.

The SWU garbage, recycling and compostables collections programs continue to evolve and undergo significant transformation largely in an effort to meet Greenest City targets and Metro Vancouver Regional targets for waste reduction and diversion. Initiatives discussed in this report target the latter half of 2012 for introducing volumetric (\$/litre) garbage cart fees simultaneously with the introduction of expanded food scraps collection city-wide (including switching collection frequencies to weekly for compostables and biweekly for garbage). A pilot of expanded food scraps collection is currently running though March 2012 to inform city-wide rollout plans. Staff will report back to Council in spring 2012 with recommendations for introducing volumetric garbage cart fees and with preliminary recommendations for city-wide implementation of biweekly garbage collection and full food scraps recycling including fee changes.

# 2012 Collections Fees

The SWU operates on a breakeven principle. Due to variability beyond the City's direct control, such as changes to market pricing of recycling commodities and the amount of material requiring disposal at Vancouver's facilities, an annual net surplus or deficit is experienced from one year to the next in the collections programs. Accordingly, the SWU carries an accumulated net surplus or deficit balance which resides in the Capital Financing Fund (Solid Waste Capital Reserve) and annual SWU fees are set to take into account the prior years' accumulated net surplus or deficit position. For December 31, 2011 staff are projecting a total accumulated net surplus of \$700,000 for the recycling and composting programs combined, and an accumulated net deficit of \$780,000 for the garbage collection program. Recommended 2012 SWU collections fees are based on estimated 2012 costs and account for the projected end of 2011 financial position. For example, for the garbage collection program, the proposed 2012 fees are set to further reduce the accumulated deficit for that program by \$360,000.

Based on the 2012 SWU fees staff is recommending, the average homeowner will see a weighted average increase of about \$13 (about \$12 for garbage and \$1 for recycling) or 5.7% in their annual total solid waste collection fees compared to 2011 fees (i.e. \$242 in 2012 vs. \$229 in 2011).

# Solid Waste Utility Rate Structure

Current SWU fees are based on cost of service and a user pay concept. Since the implementation of automated collection involving different sized carts, cart fees have been based on allocating total program costs 50:50 between the fixed and variable cost components. While this ensures the full cost of service is included in the fee charged for each cart, including a fixed cost component means individual cart fees do not increase uniformly relative to cart size.

An alternative approach, which is thought to provide a greater waste diversion incentive through a price signal, is to treat all program costs as variable by setting individual garbage cart fees based on the size of the cart (i.e. \$/litre). However, the timing of introducing volumetric garbage fees needs to be planned relative to the timing of implementing biweekly garbage collection with full food scraps recycling city-wide, since these two initiatives are anticipated to cause residents to change garbage cart sizes in opposite directions - volumetric garbage cart fees causing changes to smaller cart sizes, and biweekly garbage collection causing changes to larger cart sizes. Staff recommend introducing volumetric pricing at the same time as full scraps recycling so that it is less disruptive to SWU customers and can be better accommodated operationally.

# Landfill and Transfer Station Fees

It is City of Vancouver practice to charge the same tipping fees as the Greater Vancouver Sewerage & Drainage District (GVS&DD) does at its facilities. Net revenues from tipping fees are transferred to the Solid Waste Capital Reserve (SWCR) and are necessary to fund the full liability related to future Vancouver Landfill costs, including closure and post-closure care, and environmental issues arising during and after operation of the Landfill. Aligning City and regional tipping fees also avoids an economic incentive for waste to migrate from the higher tipping fee jurisdiction to the lower fee jurisdiction.

Accordingly, staff recommends:

- Changing the disposal fee for garbage loads from \$97/tonne to \$107/tonne;
- Adding a surcharge of \$50 per load for any garbage loads containing one or more prohibited Product Stewardship Program materials.

In addition, staff recommends adjusting fees related to the handling of mattresses, demolition materials and asbestos at the Vancouver Landfill and/or Vancouver South Transfer Station, to more closely match actual costs and/or encourage recycling.

#### COUNCIL AUTHORITY/PREVIOUS DECISIONS

On October 7, 1997, Council approved the implementation of the Solid Waste Utility effective January 1, 1998.

On September 30, 2004, Council adopted a fee structure for automated garbage and yard trimmings collection services, including a fixed fee (Service Fee) and a price per unit volume fee (Cart Fee) for each cart.

Solid Waste Utility fees are set annually to recover the full cost of providing services. Fee increases require Council approval.

On July 14, 2011 Council adopted in principle the Greenest City Action Plan (GCAP) including Long Term Goal 5 Create Zero Waste, with a 2020 Target to reduce total solid waste going to landfill or incinerator by 50% from 2008 levels. One of the GCAP strategies to reach the 2020 Target is to *Nurture a Zero Waste Culture*, which includes the following action:

 Review garbage collection fees in order to create a stronger price signal to reduce garbage in single-family homes. One possibility is to make fees more proportional to container sizes.

## CITY MANAGER'S/GENERAL MANAGER'S COMMENTS

The City Manager and General Manager of Engineering Services RECOMMEND approval of A through I above.

# **REPORT**:

#### Background/Context

The purpose of this report is to obtain Council authority to set 2012 Solid Waste Utility (SWU) fees and amend the Solid Waste By-law. The following sections highlight relevant background information.

1. City of Vancouver Solid Waste Utility (SWU)

City of Vancouver residential garbage, recycling and compostables collection operations operate as a Utility. Costs within the SWU are recovered through user fees rather than from property taxes. SWU collections fees are based on a user pay concept, and are made up of both fixed and variable cost components. A net surplus or deficit accrued in a given year is normally reflected in the following years' utility rates.

# 2. Metro Vancouver Integrated Solid Waste Resource Management Plan (ISWRMP)

The Metro Vancouver ISWRMP sets out key strategies and actions for Metro Vancouver and member municipalities to achieve four goals:

- Goal 1: Minimize waste generation
- Goal 2: Maximize reuse, recycling and material recovery
- Goal 3: Recover energy from the waste stream after material recycling
- Goal 4: Dispose of all remaining waste in landfill, after material recycling and energy recovery

The Plan sets out the following targets for the Metro Vancouver region:

- 70% waste diversion (minimum) by 2015 (increase from current 55%)
- 80% waste diversion (aspirational) by 2020
- 10% reduction (minimum) in per capita waste generation by 2020

# 3. Greenest City Action Plan

The Greenest City Action Plan set an overall goal for Vancouver to be the greenest city in the world by 2020. A total of 10 specific goals were identified, including Goal 5 - Create Zero Waste, with a 2020 Target to reduce total solid waste going to landfill or incinerator by 50% from 2008 levels.

To achieve the 2020 target, a phased approach has been developed with the highest priorites for the next three years being:

- Collect all compostables from single family residential properties on a weekly basis and introduce every-other-week garbage collection and pilot collection of compostables from multi-family and commercial properties;
- Develop zero waste education and enforcement strategies for all sectors (single family households, apartments/condominiums, commercial businesses and institutions) to encourage behaviours that reduce waste, maximize reuse and recycling and recover resources from the waste stream;
- Work with the Province to expand Extended Producer Responsibility (EPR)
  programs, especially for packaging, printed paper, plastic bags, and newsprint;
- Develop policy and incentives to encourage deconstruction for renovation and demolition projects.

# 4. Extended Producer Responsibility (EPR)

British Columbia's industry-led product stewardship programs are based on the principle of extended producer responsibility (EPR).

EPR is an environmental policy approach in which the corporate responsibility of producers is extended across the whole life cycle of their products and packaging, from selection of materials to end-of-life. EPR shifts the physical and financial responsibility for recycling away from municipalities and taxpayers and transfers it upstream to the producers of consumer goods. The goal is to provide producers with incentives to take environmental considerations into product and packaging design.

British Columbia regulates EPR programs through the Recycling Regulation. In May 2011, the province amended the Recycling Regulation to require an EPR program for packaging and printed paper to be in place by May 2014. Producers will become legally responsible for managing all packaging and printed paper generated by the residential sector and in municipal parks and streetscapes. This includes the newsprint, mixed

paper and containers currently collected in the City's recycling program. It also includes additional materials like styrofoam, plastic bags, and fast food packaging.

EPR for packaging and printed paper will result in fundamental changes to the administration of the City's curbside recycling program. Administrative changes are also expected with the City's recycling depots, abandoned garbage, and on-street litter and recycling collections programs. The exact nature of those changes, and the City's role, will not be known until the industry product stewardship agencies publish their draft stewardship plans in spring 2012. No significant changes to the City's recycling programs are being planned until details of the stewardship plans are known.

# 5. Expanded Food Scraps Collection Pilot

A pilot of expanded food scraps collection is currently running from October 2011 to March 2012 involving approximately 2,000 single-family homes. The pilot program is testing operational and communications strategies and tactics for:

- expanding the City's current single family property compostables collection program to include all types of food scraps; and
- switching the collection frequency of garbage and compostables from single family properties so that compostables are picked up weekly and garbage biweekly.

Based on pilot findings, staff will develop a detailed implementation plan and budget for city-wide roll out and report back in 2012 for Council approval, with a view to starting implementation around mid 2012.

# Strategic Analysis

The City's SWU budgets are influenced by different factors, some of which are beyond the direct control of the City. Examples include:

- costs for the provision of solid waste collection services (e.g. equipment, fuel, labour and material disposal and processing costs);
- recycling materials commodity market changes;
- growth in the number of dwelling units requiring solid waste collection services (e.g., increasing volumes of recyclables requiring collection);
- alternative and enhanced initiatives required to meet City and Regional policy and plans including the Metro Vancouver Integrated Solid Waste and Resource Management Plan and the Greenest City Zero Waste Plan (e.g. food scraps recycling and new material disposal bans); and
- various Metro Vancouver solid waste management operational decisions which may vary from year to year (e.g. quantity of regional waste transferred to Vancouver's disposal system which influences per tonne landfill operating costs).

Operating and maintenance costs comprise 95% of the total cost of the SWU collections programs, with debt charges comprising 4% and Metro Vancouver's regional solid waste services fee comprising 1%. The key budget driver is changes in operations and maintenance costs.

# 2012 Collections Fees

Recommended 2012 SWU collection fees are based on estimated 2012 expenditures and a continued reduction in an accumulated deficit in the garbage collection operations as discussed later in this report. The recommended fees reflect estimated 2012 costs for existing solid waste collection programs (garbage, recycling and compostables) and collection frequencies. Potential costs or savings resulting from program changes that may occur in 2012, such as a city-wide expansion of biweekly garbage collection and full food scraps recycling, would be reflected in a future adjustment of SWU fees and will be the subject of a report to Council in spring 2012.

For customers that are included in the current expanded food scraps collection pilot (approximately 2,000 single-family homes) staff recommends that the garbage and compostables fees billed for 2012 be based on the number and size of garbage and compostables carts in use in September 2011 prior to the start of the pilot. Fees billed for 2012 would not be adjusted for changes made to number or size of carts until Council considers recommendations on full implementation.

Based on the 2012 SWU fees staff is recommending, the average homeowner will see a weighted average increase of about \$13 (about \$12 for garbage and \$1 for recycling) or 5.7% in their annual total solid waste collection fees compared to 2011 fees (i.e. \$242 in 2012 vs. \$229 in 2011). Historical data on average SWU fees assessed to Vancouver homeowners, and a summary of 2011 solid waste fees charged by Metro municipalities and the various collections programs provided in those municipalities, is included in Appendix A.

## Solid Waste Utility Rate Structure

Current SWU fees are based on cost of service and a user pay concept. Fees charged for garbage and compostables (yard trimmings with food waste) carts are comprised of both the fixed cost (equipment and labour) and variable cost (processing and disposal) of providing those programs.

Since the implementation of automated collection involving different sized carts, cart fees have been based on allocating total program costs 50:50 between the fixed and variable cost components. While this ensures the full cost of service is included in the fee charged for each cart, including a fixed cost component means individual cart fees do not increase uniformly relative to cart size.

An alternative approach, which is thought to provide a greater waste diversion incentive through a price signal, is to treat all program costs as variable by setting individual garbage cart fees based on the size of the cart (i.e. \$/litre). However it is anticipated that switching from the current cost of service fee structure to full volumetric pricing may result in a significant number of garbage cart changes with residents switching to smaller cart sizes. The timing of introducing volumetric garbage fees needs to be planned relative to the timing of implementing biweekly garbage collection with full food scraps recycling city-wide, since this latter initiative is expected to also cause a change to the overall distribution of cart sizes, but with residents switching to larger garbage cart sizes. Therefore these two initiatives, volumetric fees and full food scraps recycling, need to be coordinated as they are anticipated to cause residents to change garbage cart sizes in opposite directions - volumetric garbage cart fees causing changes to smaller cart sizes, and biweekly garbage collection causing changes to larger cart sizes.

Staff recommend introducing volumetric pricing at the same time as full scraps recycling so that it is less disruptive to SWU customers and can be better accommodated operationally. Staff will report back to Council in spring 2012 with recommendations for introducing volumetric garbage cart fees and with preliminary recommendations for citywide implementation of biweekly garbage collection and full food scraps recycling including fee changes, based on findings from the first four months of the current pilot program.

# Solid Waste By-law Changes

In addition to fee and housekeeping changes required for the Solid Waste By-law for 2012, staff recommends updating the list of materials prohibited from disposal in garbage containers and at the Vancouver South Transfer Station and Vancouver Landfill to include the existing and future Product Stewardship Program Materials as they come into effect. A draft of Solid Waste By-Law amendments is shown in Appendix B.

# Implications/Related Issues/Risk

#### Financial

The following is a summary of 2012 SWU expenditure budgets recommended in this report:

Table 1: Expenditure Budgets

| Collections Program | Approved 2011 | Recommended 2012 | Budget Increase |
|---------------------|---------------|------------------|-----------------|
| Garbage             | \$12,414,000  | \$13,536,200     | \$1,122,200     |
| Recycling           | \$8,245,400   | \$8,898,600      | \$653,100       |
| Compostables        | \$4,956,600   | \$5,218,800      | \$262,200       |
| Total               | \$25,616,000  | \$27,653,600     | \$2,037,500     |

The SWU operates on a breakeven principle. However, each year there are variances between revenues and expenditures. Accordingly, the SWU carries an accumulated surplus or deficit balance which resides in the Capital Financing Fund (Solid Waste Capital Reserve) and annual SWU fees are set to take into account the prior years' accumulated surplus or deficit position.

The 2008 variance was a particularly large one. The 2008 garbage collection fees reflected estimated savings from the 2007 work stoppage. Actual savings and higher than budgeted disposal costs resulted in a deficit of \$1.685m in 2008. Beginning in 2009, the fees have been set to gradually reduce the accumulated deficit and as at December 31, 2011 the balance is projected to be about \$780,000. Table 2 shows the projected surplus/deficit position of each of the collection programs. In keeping with past practice, it is recommended that the 2012 SWU garbage collection fees be set to further reduce the deficit in the garbage collection operations.

Table 2: Accumulated Surplus (Deficit)

| Table 2. Accommended carpins (Benefit) |                 |                 |               |  |  |
|--|-----------------|-----------------|---------------|--|--|
|  | Projected as at | Projected as at | Budgeted 2011 |  |  |
| Collections Program                    | Dec. 31/11      | Dec. 31/12      | Change        |  |  |
|  | (\$million)     | (\$million)     | (\$million)   |  |  |
| Garbage                                | (\$0.78)        | (\$0.42)        | \$0.36        |  |  |
| Recycling                              | \$0.59          | \$0.64          | \$0.05        |  |  |
| Compostables                           | \$0.11          | \$0.0           | (\$0.11)      |  |  |
| Total                                  | (\$0.08)        | \$0.25          | \$0.33        |  |  |

# Garbage Collection

A fee increase of 8.9% (weighted average) is proposed to recover increased recommended expenditures and to further reduce an accumulated deficit balance of about \$780,000 in the garbage collection program. This accumulated deficit is primarily the balance remaining from estimated 2007 work stoppage savings that were budgeted in 2008. The recommended fee increase for 2012 is expected to reduce this deficit by about \$360,000.

The recommended 2012 expenditure budget of approximately \$13.536 million is an increase of about \$1.122 million over the 2011 budget, primarily due to increased budget for Vancouver Landfill disposal costs including contribution to the Vancouver Landfill closure and post-closure cost reserve, increased truck maintenance and capital repayment costs, and a shift in abandoned garbage program costs from the property tax supported budget to the Solid Waste Utility.

Recommended 2012 garbage collection fees are as follows:

Table 3: Garbage Collection Fees - 2011 vs. 2012

| Cart Size | 2011          | 2012             | \$        |
|-----------|---------------|------------------|-----------|
| (litres)  | Approved Fees | Recommended Fees | Change    |
| (IIII es) | (\$/year)     | (\$/year)        | (\$/year) |
| 75        | \$91          | \$99             | \$8       |
| 120       | \$109         | \$117            | \$8       |
| 180       | \$131         | \$142            | \$11      |
| 240       | \$154         | \$166            | \$12      |
| 360       | \$200         | \$216            | \$16      |

The fixed and variable fee components of the recommended 2012 garbage collection fees are shown in Table 4.

Table 4: Garbage Collection Fees - Fixed vs. Variable

| Cart Size | Fixed Fee | Cart Volume Fee | \$ Total  |
|-----------|-----------|-----------------|-----------|
| (litres)  | (\$/year) | (\$/year)       | (\$/year) |
| 75        | \$68      | \$31            | \$99      |
| 120       | \$68      | \$49            | \$117     |
| 180       | \$68      | \$74            | \$142     |
| 240       | \$68      | \$98            | \$166     |
| 360       | \$68      | \$148           | \$216     |

For properties that are not serviced by automated collection because of lane access restrictions, for example, the recommended fee for 2012 is \$42 per garbage can or bag (maximum 100 litres) plus a \$67 stop fee. Therefore, properties that set out two garbage cans per week for collection will be charged a total of \$151 in 2012.

# Recycling Collection

Staff recommends the recycling collection fees be increased by \$1 per dwelling unit for 2012. The \$1 fee increase and the 2012 budgeted revenues from the sale of recyclables are expected to be sufficient to cover the increase in recommended expenditures for 2012.

The 2012 recommended expenditure budget of \$8.899 million is an increase of \$0.653 million over the 2011 budget, primarily due to an increase in apartment recycling program contractor costs due to the growth in the number of apartment units requiring recycling

collection service and inflation (as per established agreement), adding a truck to the fleet to accommodate the continual growth in the volume of recycling and number of dwelling units served, and increased truck maintenance and capital repayment costs.

Recommended 2012 recycling collection fees are as follows:

Table 5: Recycling Collection Fees - 2011 vs. 2012

| Service Type  | 2011<br>Approved<br>Fees<br>(\$/yr) | 2012<br>Recommended<br>Fees<br>(\$/yr) | \$ Change<br>(\$/yr) |
|---|-------------------------------------|--|----------------------|
| Single dwelling unit property:  | \$31                                | \$32                                   | \$1                  |
| Multiple dwelling unit property: - per dwelling unit - per collection point | \$23<br>\$ 8                        | \$24<br>\$ 8                           | \$1<br>\$0           |

Recycling program fees are charged as an annual flat rate with no restrictions on quantity, which provides a waste diversion incentive.

Staff also recommends the 2012 annual fee for storage of recycling carts on City streets and lanes be increased from \$70 per cart to \$71.40/cart to match the Garbage Container Licence Program 2012 fee approved by Council for placing commercial garbage and recycling containers of less than 1 cubic yard on City streets and lanes.

# <u>Compostables (Yard Trimmings/Food Scraps) Collection</u>

Staff recommends no fee change for 2012 in the compostables collection program because current fees are at a sufficient level to cover the increase in budgeted expenditures. The recommended expenditure budget increase for this program is \$262,300 and is primarily due to increased composting contractor costs (as per established agreement) and increased truck maintenance and capital repayment costs.

Recommended 2012 compostables collection fees are as follows:

Table 6: Yard Trimmings/Food Scraps Collection Fees - 2011 vs. 2012

| Cart Size<br>(litres) | 2011 Approved<br>Fees<br>(\$/yr) | 2012 Recommended<br>Fees<br>(\$/yr) | \$ Change<br>(\$/yr) |
|-----------------------|----------------------------------|-------------------------------------|----------------------|
| 120                   | \$46                             | \$46                                | \$0                  |
| 180                   | \$54                             | \$54                                | \$0                  |
| 240                   | \$61                             | \$61                                | \$0                  |
| 360                   | \$75                             | \$75                                | \$0                  |

The fixed and variable fee components of the recommended 2012 compostables collection fees are shown in Table B5.

Table 7: Yard Trimmings/Food Scraps Collection Fees - Fixed vs. Variable

|           | 3 1       |                 |           |
|-----------|-----------|-----------------|-----------|
| Cart Size | Fixed Fee | Cart Volume Fee | \$ Total  |
| (litres)  | (\$/year) | (\$/year)       | (\$/year) |
| 120       | \$32      | \$14            | \$46      |
| 180       | \$32      | \$22            | \$54      |
| 240       | \$32      | \$29            | \$61      |
| 360       | \$32      | \$43            | \$75      |

#### Landfill & Transfer Station Fees

It is City of Vancouver practice to charge the same tipping fees as the Greater Vancouver Sewerage & Drainage District (GVS&DD) does at its facilities. Net revenues from tipping fees are transferred to the Solid Waste Capital Reserve (SWCR) and are necessary to fund the full liability related to future Vancouver Landfill (Landfill) costs, including closure and post-closure care, and environmental issues arising during and after operation of the Landfill. Aligning City and regional tipping fees also avoids an economic incentive for waste to migrate from the higher tipping fee jurisdiction to the lower fee jurisdiction.

# Accordingly, staff recommends:

- Changing the disposal fee for garbage loads from \$97/tonne to \$107/tonne;
- Adding a surcharge of \$50 per load for any garbage loads containing one or more prohibited Product Stewardship Program materials;

# In addition, staff recommends the following:

- Reducing the fee for recycling mattresses dropped off at the Landfill and Vancouver South Transfer Station (VSTS) from \$20/unit to \$15/unit, to more closely match the costs for the handling, hauling & recycling services and to encourage responsible management of mattresses.
- Changing the fee for loads of demolition materials received at the Landfill greater than 50 cubic metres in volume from a flat fee based on truck size to a weight-based rate of \$40 per tonne. Loads of demolition waste delivered to the Landfill in tandem and tridem trailers are currently accepted at flat rates of \$550 and \$660 per load, respectively. This translates to a per-tonne disposal fee of approximately \$30 per tonne. Increasing the fee from a flat rate to \$40 per tonne will encourage recycling opportunities.
- Adding a fee of \$50/tonne in addition to the garbage disposal fee for asbestos waste, for all commercial loads and all loads greater than 10 bags disposed at the Landfill, to recover actual costs for managing this waste.
- The new rates for demolition waste and waste asbestos are proposed to take effect on March 1, 2012 to allow for notification of the applicable customers.

#### **CONCLUSION**

Based on the budgeted 2012 expenditures, staff recommends that the SWU fees and bylaw changes described in this report be adopted for 2012.

\* \* \* \* \*

# SOLID WASTE UTILITY FEES: HISTORICAL AND REFERENCE INFORMATION

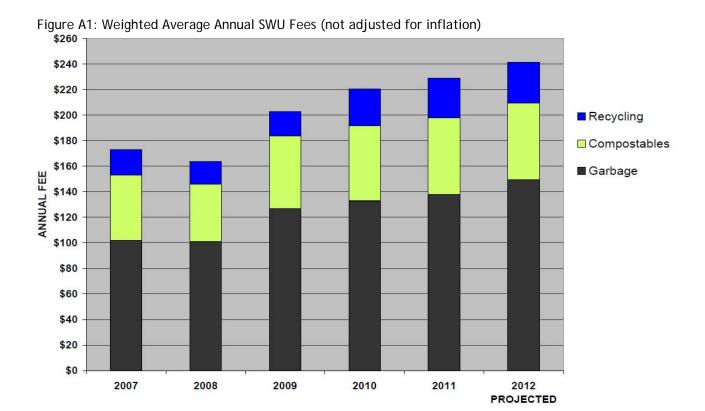


Table A1: Estimated Average 2011 Solid Waste Fees in Regional Municipalities

|                    | 2011<br>Estimated*<br>Weighted | City or<br>Contractor | Garbage              | Compostables                                 | Recycling            |
|--------------------|--------------------------------|-----------------------|----------------------|--|----------------------|
| City               | Average Fee                    | Service               | Collection           | Collection                                   | Collection           |
| Delta**            | \$160                          | contractor            | weekly<br>(manual)   | bi-weekly<br>(manual)                        | weekly<br>(manual)   |
| Port Coquitlam     | \$181                          | City                  | bi-weekly<br>(carts) | weekly May-Oct<br>bi-wkly Nov-Apr<br>(carts) | bi-weekly<br>(carts) |
| Langley City       | \$217                          | contractor            | weekly<br>(manual)   | weekly<br>(manual)                           | weekly<br>(manual)   |
| Vancouver          | \$229<br>(\$243***)            | City                  | weekly<br>(carts)    | bi-weekly<br>(carts)                         | weekly<br>(manual)   |
| Richmond           | \$234                          | contractor            | weekly<br>(manual)   | weekly<br>(manual)                           | weekly<br>(manual)   |
| New Westminster    | \$235                          | City                  | weekly<br>(carts)    | weekly<br>(carts)                            | weekly<br>(manual)   |
| West Vancouver     | \$251                          | contractor            | weekly<br>(manual)   | weekly<br>(manual)                           | weekly<br>(manual)   |
| Langley Twnshp     | \$260                          | contractor            | weekly<br>(manual)   | weekly<br>(manual)                           | weekly<br>(manual)   |
| Surrey             | \$266                          | contractor            | weekly<br>(manual)   | weekly<br>(manual)                           | weekly<br>(manual)   |
| North Van District | \$270                          | contractor            | weekly<br>(carts)    | weekly<br>(carts)                            | weekly<br>(manual)   |
| North Van City     | \$318                          | contractor            | weekly<br>(manual)   | weekly<br>(manual)                           | weekly<br>(manual)   |
| Port Moody         | \$319                          | City                  | bi-weekly<br>(carts) | Weekly<br>(carts)                            | bi-weekly<br>(carts) |
| Coquitlam          | \$326                          | contractor            | weekly<br>(manual)   | weekly<br>(manual)                           | weekly<br>(manual)   |

<sup>\*</sup> Estimated average fees based on published rates and estimated cart size distributions (where multiple cart sizes and fees are used). Extent of solid waste programs (e.g., collections, street cleaning) and costs (e.g., indirect, capital) funded by the fees billed are unknown.

<sup>\*\*</sup> The Corporation of Delta receives free residential garbage disposal at the Vancouver Landfill as per the terms of the Vancouver-Delta Agreement

<sup>\*\*\*</sup> The 2011 weighted average fee for Vancouver's SWU customers is estimated as \$243 if the full 2011 Regional Tipping Fee of \$97/tonne for disposal was charged.

#### PROPOSED CHANGES TO THE SOLID WASTE BY-LAW

- 1. In section 2, Council:
  - (a) strikes out the definitions of, "non-recyclable mattress", "recyclable mattress", and "unmarketable"; and
  - (b) adds the following definitions in the appropriate alphabetical order:
    - (i) " "asbestos waste" means any waste or discarded material ,which contains 1% or more asbestos by weight,";
    - (ii) "mattress" means a case of canvas, plastic or other heavy cloth filled with wool, cotton, foam, other fibres or similar material, with or without springs or wooden slats, that is designed for use as a bed,"; and
    - (iii) " "residential asbestos waste" means asbestos waste transported from a residence by the owner or occupant of that residence,".
- 2. Council strikes out section 5.4, and substitutes:
  - "5.4 (1) Blue boxes must not exceed a gross weight of 20 kg when full.
    - (2) Blue boxes and recycling carts must only be filled with clean, recyclable material.
    - (3) Blue boxes and recycling carts must be filled in such a manner as to be easily emptied."
- 3. In section 7.4, Council strikes out "Schedule D", and substitutes "Schedules D and G".
- 4. In sections 8.4 and 8.5, Council strikes out "Schedule E", and substitutes "Schedules E and G".
- 5. In section 8.3, in the title, Council strikes out "Landfill", and substitutes "Transfer Station and Landfill".
- 6. After section 8.8, Council adds:
  - **"8.9 Product Stewardship Program Materials**

Garbage loads disposed of at the Vancouver Landfill or Vancouver South Transfer Station, which contain materials listed in Schedule G, will be assessed a surcharge of \$50 per load."

# 7. Council strikes out Schedule A, and substitutes:

#### "SCHEDULE A

#### RATES FOR LANDFILL AND TRANSFER STATION

# I. Drop-off Rates

The following rates apply to solid waste and yard waste dropped off at the Vancouver Landfill (5400 72nd Street, Corporation of Delta) and the Vancouver South Transfer Station (377 West Kent Avenue North, Vancouver).

Solid waste and yard waste

| Type of Waste | Rate        | Peak hours minimum rate (from 10:00 a.m. to 2:00 p.m. Monday to Friday) | Non peak hours<br>minimum rate (other<br>than from 10:00 a.m.<br>to 2:00 p.m. Monday<br>to Friday) |
|---------------|-------------|---|--|
| Solid waste   | \$107/tonne | \$20  | \$10   |
| Yard waste    | \$63/tonne  | \$6   | \$6  |

All non-account charge rates are rounded to the nearest dollar.

# II. Compost Rates

The following rates apply to the sale of compost produced from yard waste at the Vancouver Landfill Composting Facility at 5400 72<sup>nd</sup> Street in the Corporation of Delta. Delivery charges are in addition to these rates.

 Compost rate
 \$20 per tonne

 ......
 (\$10 minimum)"

# 8. Council strikes out Schedule A, and substitutes:

#### "SCHEDULE A

#### RATES FOR LANDFILL AND TRANSFER STATION

# I. Drop-off Rates

The following rates apply to solid waste and yard waste dropped off at the Vancouver Landfill (5400 72nd Street, Corporation of Delta) and the Vancouver South Transfer Station (377 West Kent Avenue North, Vancouver).

Solid waste and yard waste

| Type of Waste | Rate        | Peak hours minimum rate (from 10:00 a.m. to 2:00 p.m. Monday to Friday) | Non peak hours<br>minimum rate (other<br>than from 10:00 a.m.<br>to 2:00 p.m. Monday<br>to Friday) |
|---------------|-------------|---|--|
| Solid waste   | \$107/tonne | \$20  | \$10   |
| Yard waste    | \$63/tonne  | \$6   | \$6  |

All non-account charge rates are rounded to the nearest dollar.

Where any load of solid waste or yard waste is not secured as per the requirements of the *Motor Vehicle Act*, a 100% surcharge shall be applied to the load.

Special disposal fee, in addition to the applicable disposal charge set out above, applied to nuisance waste as determined by the City Engineer......\$200 per load

Gypsum waste deposited separately for recycling ....... \$150 per tonne (\$10 minimum)

Demolition materials meeting the City Engineer's specifications for road and infrastructure construction arriving in loads that are greater than 50 cubic metres in volume......\$40 per tonne

| Mattresses deposited for recycling  |
|---|
| Residential asbestos waste, 10 bags or less per loadSolid waste Rate  |
| All other asbestos waste Solid waste Rate + \$50/tonne + Special disposal fee   |
| II. Compost Rates   |
| The following rates apply to the sale of compost produced from yard waste at the Vancouver Landfill Composting Facility at 5400 72 <sup>nd</sup> Street in the Corporation of Delta. Delivery charges are in addition to these rates. |
| Compost rate\$20 per tonne (\$10 minimum)"  |

- 9. In Section I.B. of Schedule B, Council strikes out "\$91", "\$109", "\$131", "\$154", and "\$200", and substitutes "\$99", "\$117", "\$142", "\$166", and "\$216" respectively.
- 10. In Section II.B. of Schedule B, Council strikes out "\$63", "\$63", and "\$38", and substitutes "\$67", "\$67", and "\$42" respectively.
- 11. In Section IV.A of Schedule B, Council strikes out "\$31" and "\$23" and substitutes "\$32" and "\$24".
- 12. In Section IV.C of Schedule B, Council strikes out "\$70.00", and substitutes "\$71.40".

# 13. Council strikes out Schedule D, and substitutes:

#### "SCHEDULE D

#### MATERIALS PROHIBITED FROM GARBAGE CONTAINERS

- 1. Any material or substance defined as 'Hazardous Waste' under the *Environmental Management Act*.
- 2. Pathogenic, radioactive, toxic and biomedical wastes, including sharps.
- 3. Chemicals or other materials which may create hazardous working conditions.
- 4. Material that is smoldering, hot enough to start combustion, flammable or explosive.
- 5. Liquid wastes and sludge.
- 6. Excrement.
- 7. Dead animals (excluding household kitchen meat and fish scraps) and animal parts not processed for human consumption (including bones, feathers, skin, hair, nails and teeth).
- 8. Gypsum (drywall) or gypsum containing asbestos.
- 9. Coated or uncoated wire or cable in excess of 1% by weight of any load.
- 10. Barrels, drums, pails and other large liquid containers, whether full or empty.
- 11. White goods (large appliances) and other large metallic waste.
- 12. Propane tanks.
- 13. Any soil with contaminant levels exceeding those defined for urban park land use by the *Contaminated Sites Regulation*.
- 14. Any other material which the City Engineer or Medical Health Officer considers hazardous or unsuitable to handle."
- 14. Council strikes out Schedule E, and substitutes:

#### "SCHEDULE E

# MATERIALS PROHIBITED FROM THE VANCOUVER LANDFILL AND TRANSFER STATION

The following wastes are prohibited from disposal as garbage at the Vancouver Landfill and Vancouver South Transfer Station:

- 1. Any material or substance defined as 'Hazardous Waste' under the *Environmental Management Act*.
- 2. Pathogenic, radioactive, toxic and biomedical wastes, including sharps.
- 3. Chemicals or other materials which may create hazardous working conditions.
- 4. Material that is smoldering, hot enough to start combustion, flammable or explosive.
- 5. Liquid wastes and sludge.
- 6. Excrement.
- 7. Dead animals (excluding household kitchen meat and fish scraps) and animal parts not processed for human consumption (including bones, feathers, skin, hair, nails and teeth)
- 8. Gypsum (drywall) or gypsum containing asbestos.
- 9. Coated or uncoated wire or cable in excess of 1% by weight of any load.

- 10. Barrels, drums, pails and other large liquid containers, whether full or empty.
- 11. White goods (large appliances) and other large metallic waste.
- 12. Propane tanks.
- 13. Any soil with contaminant levels exceeding those defined for urban park land use by the *Contaminated Sites Regulation*.
- 14. Automobile bodies or boat hulls.
- 15. Fabricated objects wider or thicker than 1.2 metres and longer than 2.5 metres.
- 16. Solid objects larger in cross section than 3500 cm<sup>2</sup> if longer than 2.5 metres.
- 17. Lumber, timber, logs, longer than 3.6 metres.
- 18. Mattresses.
- 19. Any other material deemed by the City Engineer as unacceptable for disposal at the Vancouver Landfill or Vancouver South Transfer Station."
- 15. Council strikes out Schedule F, and substitutes:

# "SCHEDULE F

# MATERIALS RESTRICTED FROM GARBAGE CONTAINERS AND THE VANCOUVER LANDFILL AND TRANSFER STATION

A surcharge of 50% on the tipping fee may be assessed on garbage loads disposed at the Vancouver Landfill or Vancouver South Transfer Station, that contain 5% or more by weight or volume of one or more of the following materials:

- 1. Newsprint.
- 2. Flyers.
- 3. Corrugated cardboard.
- 4. Boxboard.
- 5. Magazines and catalogues.
- 6. Telephone directories.
- 7. Office and household paper (including junk mail, envelopes, writing paper, and computer paper).
- 8. Paper egg cartons, rolls, bags, gift wrap, and cards.
- 9. Glass bottles and jars.
- 10. Ferrous and non-ferrous metal cans and tins.
- 11. Rigid plastic containers identified by the SPI Code #1 (Polyethylene Terephthalate or PET) or SPI Code #2 (High Density Polyethylene or HDPE) or SPI Code #4 (Low Density Polyethylene or LDPE) or SPI Code #5 (Polypropylene or PP).
- 12. Aluminum trays and foil.
- 13. Yard waste.
- 14. Any other material deemed by the City Engineer to be recyclable."

# 16. After Schedule F, Council adds:

#### "SCHEDULE G

# PRODUCT STEWARDSHIP PROGRAM MATERIALS

The materials included in the effective Product Stewardship Program product categories of the *Recycling Regulation* of the *Environmental Management Act*, are prohibited from garbage containers, and from disposal as garbage at the Vancouver Landfill, and Vancouver South Transfer Station. The materials include:

- 1. Antifreeze and empty antifreeze containers.
- 2. Beverage containers with deposits.
- 3. Electronics, electrical products, and associated batteries, including:
  - a. Televisions, computers, computer peripherals, desktop printers.
  - b. Scanners, fax machines, copiers.
  - c. Telephones, cell phones and answering machines.
  - d. Audio visual equipment.
  - e. Fluorescent light bulbs and lamps.
  - f. Thermostats.
  - g. Smoke detectors.
  - h. Small electronics and electrical products.
- 4. Gasoline.
- 5. Lead-acid batteries.
- 6. Oil, petroleum by-products, oil filters, and empty oil containers hydraulic, transmission and heat transfer fluids.
- 7. Paint and empty paint containers, solvents and flammable liquids.
- 8. Pesticides.
- 9. Pharmaceuticals/Medications.
- 10. Tires.
- 11. Any materials in new or expanded product categories that come into effect while this By-Law is in effect."
- 17. A decision by a court that any part of this By-law is illegal, void, or unenforceable severs that part from this By-law, and is not to affect the balance of this By-law.
- 18. This By-law is to come into force and take effect on January 1, 2012, except that section 8 is to come into force and effect on March 1, 2012.