



ADMINISTRATIVE REPORT

Report Date: November 23, 2016
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Meeting Date: December 7, 2016

TO: Vancouver City Council
FROM: General Manager of Engineering Services
SUBJECT: 2017 Solid Waste Utility (SWU) Fees & By-Law Changes

RECOMMENDATION

- A. THAT Council approve, in principle, the proposed amendments to the Solid Waste By-law, generally as set out in Appendix A, including the establishment of the 2017 rates and fees.
- B. THAT Council instruct the Director of Legal Services to bring forward for enactment amendments to the Solid Waste By-law to adjust rates and fees and make other miscellaneous related amendments generally in accordance with Appendix B.

REPORT SUMMARY

The purpose of this report is to obtain Council authority to set 2017 solid waste utility rates and fees and amend the Solid Waste By-law.

Solid waste utility rates and fees for 2017 support the garbage and green bin collection services provided to residents of the City of Vancouver. In 2017, recycling collection services will no longer be provided by the City, having been transitioned to Multi-Material BC (MMBC) on October 3, 2016. Garbage collection fees include the cost of transfer and waste disposal and green bin fees include the cost of transfer and composting of the material collected. In 2016 with the decision to have MMBC deliver recycling services Council directed staff to prepare a plan to use the recycling cost savings that would accrue in the utility to cover extra efforts needed for litter, abandoned and illegally dumped waste and general cleanliness of the City. For 2017, staff are proposing a 3.8% increase in collection fees over 2016. Table 1 lists the proposed collection fees for a representative single-family home.

Table 1 - 2017 Collection Fees for a Representative Single Family Home

Collection Rates for a Representative Single Family Home	2015	2016	% Increase	2017 Proposed	% Increase
Annual Flat Fee					
180 L Garbage Cart	\$ 103	\$ 103	0.0%	\$ 102	-0.8%
240 L Green Bin Cart	\$ 140	\$ 140	0.0%	\$ 150	6.9%
Subtotal	\$ 243	\$ 243	0.0%	\$ 252	3.7%
Recycling (One Unit + One Stop)	\$ 18	\$ 18	0.0%	\$ -	-100.0%
General Street Cleaning Service	\$ -	\$ -	0.0%	\$ 19	0.0%
Total	\$ 261	\$ 261	0.0%	\$ 271	3.8%

COUNCIL AUTHORITY/PREVIOUS DECISIONS

On October 17, 2012, Council approved full implementation of foods scraps composting including a switch to weekly collection of green bins (mixed yard trimmings and food scraps) and bi-weekly collection of garbage for single-family and duplex homes and the associated rate adjustments.

On November 19, 2013, Council approved entering into a contract with Multi-Material BC (MMBC) to allow the city to continue providing recycling services to single and multi-family residences in the city and to receive the MMBC financial incentive for the services. The contract came into effect November 30, 2013, with service delivery under that contract starting in May of 2014.

On October 14, 2014, Council enacted by-law amendments requiring all holders of business licenses and owners and occupiers of residential and non-residential properties in Vancouver to have a food waste diversion plan and ensure that food waste is disposed of according to that plan. This change was enacted in order to comply with the Metro Vancouver ban on disposal of these materials at the landfill or incinerator, which came into effect on January 1, 2015.

On November 17, 2015, Council approved terminating the MMBC contract for single family curbside and multi-family collection, and turning over recycling collection to MMBC, as the agency responsible for recycling in the Province, no later than January 2, 2017. Council further directed staff to develop a plan to utilize the savings from the transition of recycling to support expansion of programs focussed on the overall cleanliness of the City.

Solid waste utility rates are set annually to recover the full cost of providing services. Rate increases require Council approval.

REPORT

Background/Context

City of Vancouver's Zero Waste and Resource Recovery System

The City of Vancouver's zero waste and resource recovery services include collection of garbage and green bin materials, and public realm cleanliness; the operation of the Vancouver South Transfer Station ("Transfer Station") and the Vancouver Landfill ("Landfill"), both of which are owned by the City of Vancouver; the operation of recycling depots at both locations; and the processing contracts for the City collected green bin material.

Garbage

Garbage collected by City crews is delivered to the Transfer Station and then hauled to the Landfill for disposal. Both the Transfer Station and the Landfill receive garbage from the public, commercial haulers and other municipalities; the Landfill also receives garbage from Metro Vancouver's transfer facilities.

Green Bin

Green bin materials collected by City crews are delivered to the Transfer Station, where they are loaded onto transfer trailers for shipment to local composting facilities. The City has processing contracts in place with Enviro-Smart in Delta and Harvest Power in Richmond.

The Transfer Station and Landfill also receive leaves collected by City trucks, as well as yard and landscaping waste from residents and private contractors and this material is composted at the Landfill along with leaves collected by the City. The Landfill's composting facility is not designed or licensed to handle food scraps.

Recycling

Both the Transfer Station and Landfill have public recycling depots, operated by the City. Materials handled include printed paper and packaging marketed through MMBC. Recyclables collected at these depots are shipped to MMBC's designated processors. The City also collects scrap metal and other materials such as clean wood and metal for recycling at the depots and these are directed to the appropriate processing facilities.

General Street Cleaning Service

Per Council's direction to develop a plan to utilize the savings from the transition of recycling staff are recommending a reinvestment of the savings into services directed towards the overall cleanliness of the City. The impact to service levels includes: increased recovery of litter and abandoned waste; additional focus on litter and needle collection close to schools and residential areas; higher levels of service and quicker response times to service requests; addressing the overall increasing service demands; as well as new program developments to support Council's goals around increased recovery of materials for recycling and waste diversion in the public realm.

Landfill Regulatory Environment

The Landfill operates in accordance with an Operational Certificate issued by the Ministry of Environment. The Certificate specifies operational and reporting requirements, including environmental monitoring, comprehensive annual reporting and the establishment of a dedicated reserve to fund closure and post-closure costs and environmental contingencies.

Strategic Analysis

The goal of the solid waste utility is to manage the waste produced by Vancouver residents in an environmentally and financially sustainable way. A key part of the City's strategy in achieving this goal is to reduce the amount of waste requiring collection and disposal through the development of comprehensive waste diversion programs.

As described in the Greenest City Action Plan, the City has set a 2020 target of reducing the amount of Vancouver solid waste going to landfill or incineration by 50% from 2008 levels. The programs implemented by the Zero Waste and Resource Recovery Division have resulted in significant strides towards achieving this target. The City is also part of Metro Vancouver's Integrated Solid Waste and Resource Management Plan, which aims to achieve 80% diversion of waste from disposal by 2020. Achieving these goals requires an integrated approach that combines programs with regulatory tools, including bylaws and material disposal bans and comprehensive communications programs.

Major Accomplishments in 2016

- Zero Waste Initiatives and Collections
 - Initiated development of Zero Waste 2040, a long-range plan for developing a zero waste community.
 - Implementation of separate glass collection program for residential recycling.
 - Transition of residential recycling collection services to Multi-Material BC (MMBC).
 - Introduction of a compressed natural gas truck fleet for Sanitation Services.
 - Reached agreement with Metro Vancouver and Delta on management of eastern region waste at the Vancouver Landfill in 2016.
 - Completed Phase 1 planning for a construction and demolition waste recovery pilot project focused on recovering wood waste for beneficial use as biofuel.
- Transfer and Landfill
 - Installed additional landfill gas collection infrastructure to meet or exceed the target of 75% gas collection efficiency.
 - Hosted over 1,800 guests at the 2016 Landfill Open House, including 900 residents and 900 students, teachers and parents from 18 schools. In addition, 33 bus tours were provided to students, teachers and residents over a two-day period in June.
 - Completed the design work and tendered for construction (construction to be completed in 2017) for the following projects:
 - A new recycling area and other site improvements at the Transfer Station;

- Upgrades to the Landfill entrance to increase recycling opportunities and address traffic challenges; and
- Closure and gas works construction for Phase 3 Southeast and the Western 40 Hectares as part of the overall phased closure of the Landfill.
- Successfully managed increased waste tonnages from Metro Vancouver as a result of the closure of Cache Creek landfill in July.

Plans for 2017

- Zero Waste Initiatives and Collections
 - Optimize operations through the use of GPS technology.
 - Complete the Zero Waste 2040 Strategy.
 - Undertake a construction and demolition waste processing pilot project for wood waste recovery.
 - Focus on increasing the recovery of food scraps from multi-family and commercial buildings.
 - Pilot a bulky item collection program (for example, mattresses, appliances).
 - Enhance public realm cleanliness through repurposing recycling staff and resources.
 - Move funding of leaf cleaning in residential areas from the tax supported budget into the utility fee structure.
- Transfer and Landfill
 - Install additional landfill gas collection infrastructure to meet or exceed the target of 75% gas collection efficiency.
 - Complete construction of the new recycling depot and site improvements at the Transfer Station.
 - Begin constructing the new Landfill entrance and recycling area upgrades.
 - Construct Phase 3 Southeast closure and gas works and Stage 1 of 3 of the Western 40 Hectares closure and gas works.
 - Complete design of Phase 3 Northeast closure and gas works, the need for which has been accelerated by the additional Metro waste being delivered to the Landfill.
 - Update the Design, Operation and Progressive Closure Plan at the Landfill to address changes due to increased waste quantities.
 - Pilot a Construction and Demolition Resource Recovery Project at the Landfill to divert clean wood from the waste stream.
 - Expand public participation in the annual Landfill Open House in June 2017.
 - Continue to meet all regulatory requirements for site operations and management, health and safety and environmental controls.

Looking Ahead, 2018-2021

- Zero Waste Initiatives and Collections
 - Implement Zero Waste Strategy including:
 - Expansion of successful pilot projects.
 - New pilots for emerging waste diversion materials.
 - Increased diversion of food scraps and recyclables from multi-family and commercial properties.
 - Focus on ongoing improvements in service delivery, operations and customer service.
- Transfer and Landfill
 - Install additional landfill gas collection infrastructure to meet or exceed the target of 75% gas collection efficiency and expand opportunities for the beneficial use of landfill gas.
 - Construct Stages 2 and 3 of the Western 40 Hectares closure and gas works.
 - Construct Phase 3 Northeast closure and gas works.
 - Design and construct the first stage of Phase 4 closure and gas works.
 - Construct a Construction and Demolition waste Recovery Project at the Landfill.
 - Develop Zero Waste initiatives at the Landfill and Transfer Station as identified in the 2040 Zero Waste Strategy.
 - Initiate a process to design and construct a new Transfer Station with expanded waste diversion infrastructure.
 - Continue to meet all regulatory requirements.

Service Metrics

Garbage, Recyclables, and Organics Collection Service

In the past few years, waste diversion through the green bin and recycling programs has increased slightly and the overall tonnage of residential waste collected has declined. The level of increase in diverted materials and reduction in waste quantities have levelled out over the last 2 years as residents have become accustomed to the green bin program. Future efforts will focus in increasing diversion of materials from commercial facilities.

Forecasted 2016 metrics take into consideration population growth and the City's continued efforts to maximize recovery of materials in its Green Bin program.

In 2016, the City began to collect additional materials and source-separated glass under the MMBC program and recycling tonnage consequently increased. On October 3, the City's contract came to an end and MMBC assumed responsibility for recycling collection.

Service	Metric Type	COV Metric	2012	2013	2014	2015	2016F
Garbage, Recyclables and Organics Collection	Quantity	# of carts served all types	198,411	200,826	201,900	201,997	202,950
	Quality	% compostables	22.7%	34.0%	41.2%	43.9%	44.3%
		% Garbage	51.4%	39.2%	32.8%	30.8%	30.5%
		% recycling	25.9%	26.8%	26.0%	25.3%	25.3%
		% of missed collections (3-1-1)	0.20%	0.23%	0.21%	0.24%	0.22%
		# of metric tonnes collected via residential collection programs (i.e. garbage, recycling, compostables)	119,877	114,327	113,018	108,788	108,900

Transfer and Landfill Service

From 2015 to 2016, total tonnage disposed of at the Vancouver Landfill increased. This change was due to the increase in eastern region waste from Metro Vancouver coming to the Landfill as a result of the closure of Cache Creek landfill.

Gas collection continued to increase due to the construction of additional landfill gas collection infrastructure. Additional gas infrastructure improvements are planned for 2017 as part of the closure projects. City staff continue to work with the Province to implement a landfill gas prediction model that accurately represents the amount of gas produced and recovered through the existing infrastructure and supports planning for infrastructure. In 2016, the City had an average landfill gas recovery rate of 75%.

Service	Metric Type	COV Metric	2012	2013	2014	2015	2016F
Transfers and Landfill	Quantity	# tonnes disposed of at the Vancouver Landfill	716,300	601,202	548,742	550,172	700,000
	Quality	% of landfill gas collected	52%	60%	65%	71%	75%

Financial Implications

The solid waste utility has two distinct areas of service:

1. Collection of Vancouver residential garbage and green bins, and leaves, abandoned waste and illegally dumped material in lanes and on streets in residential areas, which is funded by utility fees;
2. Disposal of City and Regional waste, which is funded by tipping fees charged at the Transfer Station and Landfill. This report seeks approval for the 2017 solid waste collection rates and 2017 tipping fees.

Table 4 shows the 2016 forecast, 2016 budget, and 2017 proposed budget for the solid waste utility as a whole.

Table 4 - Operating Statement for the Solid Waste Utility

Solid Waste Utility (\$ millions)	2016 Forecast	2016 Budget	2017 Proposed	\$ Change from 2016 Budget	% Change
Revenues					
Collections	\$ 33.6	\$ 35.1	\$ 29.0	\$ (6.1)	-17.3%
Disposal	34.1	31.5	34.7	3.3	10.4%
Total Revenues	\$ 67.6	\$ 66.6	\$ 63.8	\$ (2.8)	-4.2%
Expenses					
Salaries & Benefits	22.1	21.4	18.8	2.5	11.9%
Equipment & Fleet	14.2	14.5	13.7	0.8	5.7%
Contracted Services	6.3	6.3	4.0	2.2	35.8%
Regional Utility Charges	4.6	4.4	4.5	(0.1)	-1.8%
Utilities Supported Public Realm Cleanliness	-	-	3.5	(3.5)	0.0%
New Programs - Bulky Item Pilot	-	-	0.5	(0.5)	0.0%
Other	2.5	4.4	2.3	2.1	47.6%
Supplies & Materials	1.9	2.2	1.9	0.3	12.1%
Building Occupancy & Maintenance	1.0	1.9	1.9	0.1	3.8%
CFF Loan Repayments	2.3	2.3	2.3	(0.1)	-4.0%
Internal Allocations	2.1	2.1	2.5	(0.4)	-18.1%
Other Transfers	0.3	0.3	0.2	0.1	19.4%
Total Expenses	57.2	59.7	56.1	3.6	6.1%
Operating Surplus/(Deficit)	10.4	6.8	7.7	0.8	12.2%
Transfer to Solid Waste Capital Reserve	10.4	6.8	7.7	(0.8)	-12.2%
Surplus/(Deficit) After Transfers	\$ -	\$ -	\$ -	\$ -	0.0%

*Tables may not sum due to rounding

Utility revenues are forecasted to be higher than budget for 2016 because of higher garbage volumes, due in part to Metro's 2015 implementation of a graduated tipping fee and in part to the July 2016 closure of the Cache Creek landfill. Higher than expected disposal revenue is partially offset by less than expected cost recoveries from MMBC, because of the City's divestment from recycling collection as of October 3, 2016. Utility expenses are forecasted to be lower than budget due to the divestment from recycling collection as well as various operating savings at the Vancouver Landfill.

In 2017, budgeted utility revenues will decrease by \$2.8 million due to the loss of MMBC cost recoveries, this is partially offset by higher utility revenues and higher disposal revenue due increased garbage volumes. Budgeted utility expenses will increase by \$3.6 million, mostly as a result of a utility-funded investment in leaf collection and the clean-up of, litter and needles, abandoned waste and illegally dumped material. Budgeted transfers to reserve are expected to increase by \$0.8 million due to higher disposal revenues.

The following sections provide additional detail on collection and disposal services by program area.

Collection Services (Garbage, Green Bin, Recycling and General Street Cleaning Service)

Labour and equipment costs are key cost drivers of solid waste collections. City crews perform the majority of garbage and green bin collection services (all single family and approximately 1,300 multi-family buildings). Commercial, institutional and industrial garbage and green bin collection is arranged privately by business operators. Residential recycling collection is organized by MMBC.

Table 5 shows the forecasted financial results of the collection services for 2016 and the budgets for 2016 and 2017.

Table 5 - Operating Statement for Solid Waste Collection

Collections Services (\$ millions)	2016 Forecast	2016 Budget	2017 Proposed	\$ Change from 2016 Budget	% Change
Revenues					
Annual Flat Fees	\$ 27.1	\$ 26.9	\$ 29.0	\$ 2.1	7.9%
MMBC Recoveries	6.5	8.2	-	(8.2)	-100.0%
Total Revenues	\$ 33.6	\$ 35.1	\$ 29.0	\$ (6.1)	-17.3%
Expenses					
Garbage	7.0	6.6	7.4	(0.9)	-13.3%
Garbage Disposal, at Cost	3.7	3.7	3.4	0.3	7.7%
Compostables	12.1	11.7	13.0	(1.3)	-10.9%
Recycling	8.1	9.9	-	9.9	100.0%
General Street Cleaning Service	-	-	5.2	(5.2)	0.0%
MMBC Contingency	1.7	2.4	-	2.4	100.0%
Total Expenses	32.6	34.3	29.0	(5.3)	-15.4%
Operating Surplus/(Deficit)	1.0	0.8	-	(0.8)	-100.0%
Transfer to Reserve	1.0	0.8	-	0.8	100.0%
Surplus/(Deficit) After Transfers	\$ -	\$ (0.0)	\$ -	0.0	-100.0%

**Tables may not sum due to rounding*

For 2016, annual flat fees are expected to be essentially on budget. MMBC recoveries are expected to be under budget due to the divestment from recycling collection. Expenses are forecasted to be under budget, also due to the divestment from recycling as well as higher than budgeted garbage and compostable equipment costs due to the transition to the new CNG fleet and related staff overtime.

In 2017, annual flat fee revenue will increase by \$2.1 million due to the increase in collection rates. The City will receive no MMBC recoveries. Expenses are expected to fall by \$5.3 million due to divestment from recycling partially offset by investment in public realm cleanliness, leaf cleaning and piloting a large item collection program for residents to help reduce pressure on the abandoned waste program.

Disposal Services (Landfill and Transfer Station)

Table 6 shows the forecasted operating results of the Landfill and Transfer Station for 2016 and the budgets for 2016 and 2017.

Table 6 - Operating Statement for the Landfill and Transfer Station

Disposal Services (\$ millions)	2016 Forecast	2016 Budget	2017 Proposed	\$ Change from 2016 Budget	% Change
Revenues					
Tipping Fees	\$ 34.0	\$ 29.8	\$ 36.4	\$ 6.6	22.2%
Add: Metro/Delta (Surplus Payments)/Cost Recoveries	\$ (3.5)	(1.2)	(4.1)	(2.9)	231.1%
Other	\$ 3.6	2.9	2.5	(0.5)	-16.5%
Total Revenues	\$ 34.1	\$ 31.5	\$ 34.7	\$ 3.3	10.4%
Expenses					
Transfer Station	\$ 8.1	8.1	8.8	(0.6)	-7.9%
Less Vancouver residents' prorata share	\$ (1.9)	(1.9)	(2.1)	0.2	-8.0%
Landfill	\$ 20.2	20.9	21.7	(0.8)	-3.7%
Less Vancouver residents' prorata share	\$ (1.7)	(1.7)	(1.3)	(0.4)	25.1%
Total Expenses	\$ 24.6	25.4	27.1	1.7	6.7%
Operating Surplus/(Deficit)	\$ 9.4	6.0	7.6	1.6	25.9%
Transfer to Reserve	\$ 9.4	6.0	7.6	(1.6)	-25.9%
Surplus/(Deficit) After Transfers	\$ -	\$ -	\$ -	\$ -	0.0%

**Tables may not sum due to rounding*

Disposal revenue is expected to be higher than budget in 2016 due to higher garbage volumes. Transfer Station costs are expected to be on budget. Landfill expenses are expected to be lower than budget due to various operational savings: for instance, hydro charges are lower than budgeted and roads and cover material cost less due to smaller work areas and reuse of existing rock.

In 2017, budgeted disposal revenue will increase by \$3.8 million due to higher garbage volumes. Budgeted disposal expenses will increase by \$1.7 million due to investments in leachate separation, litter removal, mattress handling costs and weighscale staffing and maintenance expenses. Loan repayments to the capital financing fund for gas control work undertaken as part of the Phase 2 closure project and higher solid waste management staffing expenses, which are largely allocated to the Landfill and Transfer Station, will also increase disposal costs.

Due to increased volumes at the Landfill, the 2017 transfer to the Solid Waste Capital Reserve (SWCR) is budgeted at \$7.6 million, \$1.6 million higher than the budgeted transfer in 2016.

Five Year Outlook

Staff project that collection expenses will grow by 2% annually over the period 2018 - 2021 and that collection rate revenue will increase accordingly. Transfer and Landfill expenses are expected to grow by 2% annually; Metro-set tipping fees are expected to grow by 3%. Net utility surplus forms the annual transfer to the Solid Waste Capital Reserve.

Table 7 projects the effect of annual transfer and other changes to the Solid Waste Capital Reserve balance over the next five years.

Table 7 - Five-Year Projection for the Solid Waste Capital Reserve

Solid Waste Capital Reserve 5-Year Projection (\$ millions)	2015	2016	2017	2018	2019	2020	2021
Opening Balance	\$ 71.9	\$ 85.3	\$ 91.2	\$ 69.1	\$ 60.1	\$ 59.1	\$ 68.4
Annual Contribution to Reserve	\$ 7.2	\$ 6.0	\$ 7.6	\$ 6.5	\$ 5.8	\$ 5.5	\$ 5.5
Interest	\$ 1.3	\$ 1.5	\$ 1.6	\$ 1.3	\$ 1.1	\$ 1.1	\$ 1.2
Metro Vancouver Cost Sharing	\$ 5.9	\$ 0.3	\$ 0.5	\$ 8.8	\$ 7.1	\$ 4.1	\$ 0.4
Landfill Closure	\$ (1.1)	\$ (2.0)	\$ (31.8)	\$ (25.6)	\$ (14.9)	\$ (1.5)	\$ (15.0)
Closing Balance	\$ 85.3	\$ 91.2	\$ 69.1	\$ 60.1	\$ 59.1	\$ 68.4	\$ 60.5

Metro Vancouver cost sharing is based on the cumulative portion of Landfill tonnes attributed to Metro Vancouver, currently 27.6%. Planned closure work over the next five years includes the following projects:

- Close Phase 3 Southeast in 2017;
- Close Western 40 Hectares in 2017 - 2019
- Close Phase 3 Northeast in 2018; and
- Close Phase 4 Southeast in 2020 - 2021.

Legal Implications

The Solid Waste By-law requires amendments to address recent changes and to align with Metro Vancouver's tipping fee bylaw. Recommendation B seeks approval to authorize the Director of Legal Services to bring forward the by-law amendments necessary to address those changes. Therefore, in addition to basic rate and fee changes, this report recommends the following amendments to the Solid Waste By-law:

- Increasing the disposal rate for solid waste from Delta Farms from \$9 to \$15 per load for up to 3 tonnes, and restricting usage of this rate to 5 loads per year;
- Increasing the disposal rate for demolition hog at the Landfill from \$20 to \$30 per tonne, aligning the City's rate with those of the market;
- Changing the rate for nuisance waste requiring burial at the Landfill (to address safety concerns and minimize negative operational impacts such as odour and litter) from \$200 per load to \$200 per tonne (\$50 minimum) to align with operational costs;

- Changing the rate for commercial asbestos waste to \$250 per tonne (\$50 minimum) to align with operational costs;
- Increasing the surcharge rate for disposal of one or more hazardous and operational impact materials or Product Stewardship Program materials from \$50 to \$65 per load; and
- Decreasing the surcharge threshold for organics and clean wood waste in solid waste loads to 5% effective July 1, 2017.

A draft of the Solid Waste By-law amendments is provided in Appendix B.

CONCLUSION

Based on the budgeted 2017 expenditures, staff recommend that the solid waste utility rates and by-law changes described in this report be adopted for 2017.

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Appendix A
Solid Waste By-Law No. 8417
2017 Rate Changes

Schedule A	Flat Rate Collection Fees	Proposed		
		2016	2017	% Increase
<u>Garbage (Bi-weekly Collection)</u>				
Cans:				
	Per stop	\$55	\$55	0.4%
	Per can	\$26	\$26	-2.5%
Cart Size:				
	75 L	\$75	\$75	-0.4%
	120 L	\$87	\$86	-0.7%
	180 L	\$103	\$102	-0.9%
	240 L	\$119	\$117	-1.1%
	360 L	\$151	\$148	-1.4%
<u>Garbage (Weekly Collection)</u>				
Cans:				
	Per stop	\$74	\$74	-0.3%
	Per can	\$30	\$29	-2.8%
Cart Size:				
	75 L	\$97	\$96	-0.9%
	120 L	\$110	\$109	-1.1%
	180 L	\$128	\$126	-1.3%
	240 L	\$146	\$144	-1.5%
	360 L	\$182	\$179	-1.8%
<u>Green Bin</u>				
Cart Size:				
	120 L	\$104	\$111	6.7%
	180 L	\$122	\$130	6.8%
	240 L	\$140	\$150	6.8%
	360 L	\$176	\$189	6.9%
<u>Recycling</u>				
	Per stop	\$5	\$0	-100.0%
	Per dwelling unit	\$13	\$0	-100.0%
	Per cart	\$0	\$189	N/A
<u>General Street Cleaning Service</u>				
	Per dwelling unit	\$0	\$19	N/A

Appendix A
Solid Waste By-Law No. 8417
2017 Rate Changes

Schedule B	Disposal Fees	2016	Proposed 2017	% Increase
<u>Waste Discharge</u>				
Municipal solid waste (MSW) loads < 1 tonne	per tonne	\$133	\$133	0.0%
MSW loads 1 - 9 tonnes	per tonne	\$112	\$112	0.0%
MSW loads > 9 tonnes	per tonne	\$80	\$80	0.0%
MSW - local governments	per tonne	\$100	\$100	0.0%
MSW transaction fee	per transaction	\$5	\$5	0.0%
Asbestos - residential	per tonne	\$133	\$133	0.0%
Asbestos - commercial	per tonne	MSW + \$50 per tonne + burial fee	\$250	N/A
Nuisance waste	per tonne	MSW + burial fee	\$200	N/A
Demo	per tonne	\$75	\$75	0.0%
Demo hog	per tonne	\$20	\$30	50.0%
Burial charge	per burial	\$250	\$250	0.0%
Delta farm waste (MSW, yard trimmings, clean wood waste)	per load, up to 3 tonne	\$9	\$15	66.7%
Foundry slag & sand	per tonne	\$5	\$8	58.7%
<u>Surcharge Rates</u>				
Banned product stewardship surcharge	per load	\$50	\$65	30.0%
Banned hazardous & operational impact material surcharge	per loads	\$50	\$65	30.0%
Banned recyclable materials surcharge	per tonne	MSW + 50%	MSW + 50%	0.0%
Unsecured load	per tonne	MSW + 100%	MSW + 50%	N/A
<u>Waste Diversion</u>				
Yard trimmings	per tonne	\$67	\$67	0.0%
Clean wood waste	per tonne	\$67	\$67	0.0%
Drywall	per tonne	\$133	\$150	12.8%
Drywall transaction fee	per transaction	\$5	\$5	0.0%
Mattresses	per piece	\$15	\$15	0.0%
<u>Goods for Sale</u>				
Compost	per tonne	\$16	\$16	0.0%
Compost (account customers)	per m3	\$8	\$8	0.0%
	minimum fee	\$5	\$5	0.0%
Compost (Delta farmers)	per cubic metre	\$1	\$1	0.0%

* MSW = municipal solid waste

BY-LAW NO. _____

**A By-law to amend
Solid Waste By-law No. 8417
Regarding miscellaneous amendments, street cleaning, billing and fees**

THE COUNCIL OF THE CITY OF VANCOUVER, in public meeting, enacts as follows:

1. This By-law amends the indicated provisions of Solid Waste By-law No. 8417.
2. In section 2, Council:
 - (a) strikes out the definitions of "Director of Finance", "collection point", "recyclable paper", "residential recyclable materials diversion program" and "surcharge";
 - (b) adds the following definitions in the correct alphabetical order:

"collection point" means a location where one or more garbage cans are placed for collection by the City of Vancouver,

"Collector" means the Director of Finance or an authorized representative of the Director of Finance,

"PPP cart" means a wheeled recycling container used for the purposes of the Packaging and Printed Paper Product Stewardship Program approved pursuant to the Environmental Management Act,

"personal hygiene products" means personal care products, including but not limited to diapers, feminine hygiene products and incontinence products,

"recyclable paper" includes newspapers and inserts, flyers, magazines, catalogues, telephone directories, paper gift wrap and greeting cards, writing paper, computer paper, mail, envelopes, paper bags, boxboard and corrugated cardboard, but excludes photographic paper, tissue paper, paper napkins and towels, carbon paper, paper that is adhered to plastic or metal, composite paper products such as tetrapak containers, and gable-top paper containers such as milk cartons,

"residential recyclable materials diversion program" means a program to divert residential recyclable material from disposal at a landfill or incinerator site, and includes:

 - (a) producing no residential recyclable materials,
 - (b) use of a licensed hauler who lawfully brings the material to a Material Recovery Facility or otherwise disposes of the residential recyclables in accordance with this By-law, and

- (c) disposing of the residential recyclable materials directly at an approved private or public recycling facility in accordance with this By-law, or
- (d) any combination of the above,

"surcharge" means the amount charged in addition to the applicable disposal rates for having a load that is not secured as per the requirements of the *Motor Vehicle Act*, or for disposing of banned material as set out in Part II of Schedule A of this By-law,".

3. Council strikes out "Director of Finance" wherever it appears and substitutes "Collector".

4. In Part V, Council:

- (a) strikes out section 5.1 and substitutes:

"5.1 Recycling Service

- (1) The owner or occupier of a non-residential property may request that the City Engineer provide recycling collection service at the rates provided for in this By-law, and the City Engineer may provide such services if, in the opinion of the City Engineer, such services are compatible with the operation of the City's existing recycling services.
- (2) The owner or occupier of non-residential premises which receive recycling collection service from the City must pay the applicable rates for service set out in Part IV of Schedule B to this By-law.";

- (b) strikes out section 5.4 and substitutes:

"5.4 Deleted"; and

- (c) strikes out section 5.6(1) and substitutes:

"

- (1) Subject to subsection 2, the City will service recycling carts that are located within 50 metres of the nearest point that the collection vehicle can safely access."

5. In Part VII, Council adds, in numerical order:

"7.6 General street cleaning service levy

- (1) The city provides general street cleaning service to remove leaves, litter, solid waste and other discarded items in streets and lanes in residential areas.

- (2) The owner or occupier of a house, strata duplex, rowhouse, apartment or rental apartment must pay the applicable levy for service set out in Part VI of Schedule B to this By-law."

6. In Part VIII, Council strikes out sections 8.3 and 8.4 and substitutes:

"8.3 Transfer Station and Landfill

- (1) Any person who wishes to drop off solid waste acceptable to the city at the Vancouver Landfill on 72nd Street, Delta, British Columbia or at the Vancouver South Transfer Station at 377 West Kent Avenue North in the city must pay the rates set out in Schedule A.
- (2) Despite section 8.3(1), the City Engineer may, at the discretion of the City Engineer, waive the rates set out in Schedule A, in writing, in advance, in the case of solid waste that the City Engineer determines:
 - (a) has been collected:
 - (i) by a non-profit or community group,
 - (ii) during a community clean-up project,
 - (iii) from a from a publicly owned area such as a park, street or beach; and
 - (b) is not recyclable or hazardous materials.
- (3) No person shall scavenge or salvage any solid waste from the Transfer Station or Landfill.

8.4 Materials Banned from the Vancouver Landfill and Transfer Station

No person shall dispose of

- (a) anything described in Schedule E and Schedule G to this By-law;
- (b) a solid waste load that contains more than 5% by weight or by volume of materials listed in Schedule F of this by-law other than clean wood waste and food waste;
- (c) a solid waste load that contains more than
 - (i) 25% by weight or by volume of food waste until June 30, 2017, and
 - (ii) 5% by weight or by volume of food waste after July 1, 2017; or
- (d) a solid waste load that contains more than

- (i) 10% by weight or by volume of clean wood waste until June 30, 2017, and
- (ii) 5% by weight or by volume of clean wood waste after July 1, 2017

at either the Vancouver Landfill or the Vancouver South Transfer Station.”

7. In Part IX, Council:

- (a) strikes out section 9.1(2)(c) and substitutes:

“(c) keep each private container that is visible from a street or lane and is greater than one cubic yard in size locked, except for the purposes of putting solid waste into the container, and”;
; and

- (b) in section 9.2A(1)(g) strikes out “meter” and substitutes “yard”.

8. In Part X, Council:

- (a) strikes out section 10.3(4) and substitutes:

“(4) *Limits on refund or credit of overpayments for reduced rates due to change in use*

The Collector may refund or credit overpayments resulting from reduction of rates due to a change in use of the premises, subject to the following provisions:

- (a) the Collector must calculate the credit or refund from the later of the date of receipt of notice or the actual change, as determined by the Collector;
- (b) the Collector must refund or credit any overpayment for the current year and may refund overpayments for a maximum of two years prior to the current year; and
- (c) no interest shall be paid on refunds or credits.

(5) *Limits on back billing for increased rates due to change in use*

Where an increase in rates results from a change in use of the premises or any other matter the Collector must issue an invoice to a customer, subject to the following provisions:

- (a) the Collector must calculate the increase from the date on which the change actually occurs; and

SCHEDULE A

RATES FOR LANDFILL AND TRANSFER STATION

I. Drop-off Rates

The following rates apply to solid waste, yard waste, clean wood waste, wood waste, and new gypsum (drywall) 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, yard waste, clean wood waste, wood waste and new gypsum (drywall)

Type of Waste	Rate	Peak hours minimum charge (from 10:00 a.m. to 2:00 p.m. Monday to Friday, excluding Statutory Holidays)	Non peak hours minimum charge (other than from 10:00 a.m. to 2:00 p.m. Monday to Friday)
Solid waste, other than municipal garbage	\$133/tonne for 0 to 0.99 tonnes to a maximum of \$112 per load \$112/tonne for 1.00 to 8.99 tonnes to a maximum of \$720 per load \$80/tonne for 9.00 or more tonnes	\$20	\$10
Municipal garbage	\$100/tonne	\$20	\$10
Yard waste and clean wood waste	\$67/tonne	\$6	\$6
Wood waste, but only at Vancouver Landfill	\$67/tonne	\$6	\$6
New gypsum (drywall), at the Transfer Station	\$5 for up to ½ a sheet (4'x4')	\$5	\$5
New gypsum (drywall), at the Landfill	\$150/tonne for up to 0.5 tonne	\$10	\$10

All charge rates based on weight are determined by rounding the weight of a load up to the nearest 0.01 tonnes

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

Mattresses deposited for recycling \$15/piece

Where any portion of a load consists of recyclable materials which are deposited separately for recycling, and for which there is no drop off rate, for that portion No Charge

A load that contains any combination of materials subject to different disposal rates and the customer chooses not to weigh-out after dropping off each material, the entire load will be subject to the highest rate payable for any part of the load.

The following rates apply to solid waste dropped off at the Vancouver Landfill (5400 72nd Street, Corporation of Delta).

Used residential Gypsum (drywall) \$150 per tonne
(\$10 minimum)

Solid waste from Delta Farms that contains less than 5% by weight or by volume of materials listed in Schedule F, and does not contain any materials listed in Schedules E and G \$15 per load for up to 3 tonnes, for up to 5 loads per year

Special handle waste (nuisance waste) requiring burial, as determined by the City Engineer ...
..... \$200 per tonne
(\$50 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 \$75 per tonne

Demolition hog materials meeting the City Engineer's specifications for surfacing tipping pads and temporary access roads \$30 per tonne

Crushed asphalt and concrete **meeting the City Engineer's specifications** No Charge

Foundry slag and sand meeting the City Engineer's specifications for road construction \$8 per tonne

Residential asbestos waste, 10 bags or less per load..... Solid waste Rate

All other asbestos waste..... \$250 per tonne
(\$50 minimum)

II. Surcharge Rates

Where any solid waste load disposed of at the Vancouver Landfill or the Vancouver South Transfer Station contains 5% or more by weight or by volume of materials listed in Schedule F, other than clean wood waste and food waste, a 50% surcharge will be applied to the load.

Where any solid waste load disposed of at the Vancouver Landfill or the Vancouver South Transfer Station contains 5% or more by weight or by volume of recyclable paper that has been contaminated with grease, oil, food residue or other material, a 50% surcharge will be applied to the load.

Effective January 1, 2017 to June 30, 2017, where any solid waste load disposed of at the Vancouver Landfill or the Vancouver South Transfer Station contains 25% or more by weight or by volume of food waste, a 50% surcharge will be applied to the load.

Effective January 1, 2017 to June 30, 2017, where any solid waste load disposed of at the Vancouver Landfill or the Vancouver South Transfer Station contains 10% or more by weight or by volume of food waste, a 50% surcharge will be applied to the load.

Effective as of July 1, 2017, where any solid waste load disposed of at the Vancouver Landfill or the Vancouver South Transfer Station contains 5% or more by weight or by volume of food waste, a 50% surcharge will be applied to the load.

Effective as of July 1, 2017, where any solid waste load disposed of at the Vancouver Landfill or the Vancouver South Transfer Station contains 5% or more by weight or by volume of clean wood waste, a 50% surcharge will be applied to the load.

The surcharge rates above will be waived for loads of special handle waste received at the Vancouver Landfill.

Where any solid waste load disposed of at the Vancouver Landfill or the Vancouver South Transfer Station contains one or more materials listed in Schedules E and G, a \$65.00 surcharge will be applied to the load plus removal and remediation costs where applicable.

Where any load of solid waste, yard waste, clean wood waste, wood waste and/or recyclable materials is not secured as per the requirements of the *Motor Vehicle Act*, a 50% surcharge shall be applied to the load to a maximum surcharge value of \$50.

Where a single load is subject to multiple surcharges, the surcharge with the highest value will apply for the weight of the entire load.

III. Compost Rates

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

Compost rate.....	\$16 per tonne (\$5 minimum)
Compost rate, for Delta Farmers	\$1 per cubic meter

IV. Transaction fee

In addition to all other charges, a \$5 fee is imposed on all Solid Waste transactions, including mixed loads, nuisance waste loads, asbestos waste loads, and new and used gypsum (drywall).

SCHEDULE B

RATES FOR COLLECTION SERVICES

I. Garbage Cart Collection Service

A. Residential Property

The following allocation applies to residential properties:

Number of Dwelling Units	Minimum Allocated Garbage Volume (per collection period)	Minimum Allocated Garbage Carts (per collection period)
1 unit	50 litres	75 litre
2 units	100 litres	120 litre
3 units	150 litres	180 litre
4 units	200 litres	240 litre
5 units	250 litres	360 litre
6 units	300 litres	360 litre
7 units	350 litres	360 litre
8 units	400 litres	240 litre, 180 litre
9 units	450 litres	240 litre, 240 litre
10 units	500 litres	360 litre, 180 litre
11 units	550 litres	360 litre, 240 litre
12 units	600 litres	360 litre, 240 litre
13 units	650 litres	360 litre, 360 litre
14 units	700 litres	360 litre, 360 litre
15 units	750 litres	360 litre, 240 litre, 180 litre
16 units	800 litres	360 litre, 240 litre, 240 litre
16 units	800 litres	360 litre, 240 litre, 240 litre
17 units	850 litres	360 litre, 360 litre, 180 litre
18 units	900 litres	360 litre, 360 litre, 180 litre
19 units	950 litres	360 litre, 360 litre, 240 litre
20 units	1000 litres	360 litre, 360 litre, 360 litre
21 units	1050 litres	360 litre, 360 litre, 360 litre

B. Garbage Cart Rates

For those properties which receive garbage cart collection service under Part IV - Garbage Service, per calendar year, the following rates are payable concurrently with each year's real property taxes:

Garbage Cart Size	Biweekly Collection Rate	Weekly Collection Rate
75 litres	\$75	\$96
120 litres	\$86	\$109
180 litres	\$102	\$126
240 litres	\$117	\$144
360 litres	\$148	\$179

II. Garbage Can Collection Service

A. Residential Property

The following allocation applies to residential properties:

Number of Dwelling Units	Allocated Garbage (per collection period)
1 unit	2 garbage cans
2 units	2 garbage cans
3 units	3 garbage cans
4 units	3 garbage cans
5 units	4 garbage cans
6 units	4 garbage cans
7 units	5 garbage cans
8 units	5 garbage cans
9 units	6 garbage cans
10 units	6 garbage cans
11 units	7 garbage cans
12 units	7 garbage cans
13 units	8 garbage cans
14 units	8 garbage cans
15 units	9 garbage cans
16 units	9 garbage cans
17 or more units	10 garbage cans

B. Garbage Can Rates

For those properties which receive garbage can collection service under Part IV Garbage Service, per calendar year, the following rates are payable concurrently with each year's real property taxes:

biweekly collection	\$55.00
weekly collection	\$74.00

except for rowhouses which have one or more common collection points, at locations agreed to by the City Engineer, for each collection point where service is provided the following rates are payable:

biweekly collection	\$55.00
weekly collection	\$74.00

plus for each garbage can allocated or purchased, per calendar year, the following rates are payable concurrently with each years real property taxes:

biweekly collection	\$26.00
weekly collection	\$29.00

III. Miscellaneous Service

A. City Sticker Service

Each additional garbage bag with a city sticker affixed to the contents..... \$2.00

B. Purchase of Additional Garbage Service

Each property owner will be allowed one change per calendar year in the level of service under sections 4.1, 4.2 and 4.3 at no charge. A fee of \$25.00 will be charged for each additional change in that calendar year.

IV. Recycling Collection Service

A. Basic Recycling Rates

For those properties which receive recycling collection service under Part V - Recycling Service, per calendar year, the following rates are payable concurrently with each year's real property taxes \$189.00 per recycling cart

B. Additional Storage Charges

For those properties which store recycling carts or PPP carts on streets or lanes.....\$91.58 per cart

V. Green Cart Collection Service

A. Green Cart Rates

For properties which receive green cart collection service under **PART VI - GREEN CART SERVICE**, per calendar year, the following rates are payable concurrently with each year's property taxes

Size of green cart	Rate
120 litres	\$111
180 litres	\$130
240 litres	\$150
360 litres	\$189

B. Purchase of Additional Green Cart Service

Each property owner will be allowed one change per calendar year in the level of service under this By-law, without charge. A fee of \$25.00 will be charged for any additional change in that calendar year.

VI. Street Cleaning Services Levy

For each dwelling unit \$19.00

SCHEDULE E

HAZARDOUS AND OPERATIONAL IMPACT MATERIALS BANNED FROM THE VANCOUVER LANDFILL AND TRANSFER STATION

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

1. Automobile bodies.
2. Refuse that is on fire, smoldering, flammable or explosive.
3. Hazardous Waste as defined in the Hazardous Waste Regulation (B.C. Reg. 63/88), with the exception of asbestos waste delivered to the Vancouver Landfill in accordance with the Asbestos Policy.
4. Propane tanks.
5. Liquids or sludge.
6. Coated or uncoated wire and cable that exceeds either 1% of the total weight of the load or 1% of the total volume of the load.
7. Dead animals from personal or business activities.
8. Inert fill material including soil, sod, gravel, concrete and asphalt exceeding 0.5 cubic metres per load.
9. Excrement, other than amounts of pet excrement that are double bagged and discarded with Municipal Solid Waste and that do not exceed either 5% of the total weight of the load or 5% of the total volume of the load.
10. Barrels, drums, pails or other large (205 litre or greater) liquid containers, whether full or empty.
11. Any single object that:
 - i) weighs more than 100 kilograms, or
 - ii) exceeds 0.35 square metres in cross section at any point, or
 - iii) exceeds 1.2 metres in width and/or 2.5 metres in length, or
 - iv) exceeds 3 cubic metres in volume.
12. Gypsum (drywall) or gypsum containing asbestos.
13. Mattresses.
14. Personal hygiene products where the personal hygiene products make up more than 10% of the total weight of the load unless the personal hygiene products are double bagged in sealed plastic bags that are sufficiently durable to resist leaking or breaking during collection and disposal.
15. Any material that would cause undue risk of injury or occupational disease to any person at the Vancouver Landfill and Transfer Station or that would otherwise contravene the Occupational Health and Safety Regulation (B.C. Reg. 296/97) enacted pursuant to the Workers Compensation Act, as amended or replaced from time to time.
16. Any other material deemed by the City Engineer as unacceptable for disposal at the Vancouver Landfill or Vancouver South Transfer Station.

SCHEDULE F

RECYCLABLE MATERIALS

1. Recyclable Paper
2. Corrugated Cardboard.
3. Plastic Packaging including:
Rigid plastic bottles (non-beverage), jugs, jars, clamshells, trays, pails, tubs, cold drink cups and planter pots, 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).
4. Metal Packaging including:
 - i) Ferrous and non-ferrous metal cans (non-beverage), and
 - ii) Aluminum foil and foil containers.
5. Glass Packaging including:
 - i) Glass bottles and jars (non-deposit).
6. Beverage containers identified in "Schedule 1 – Beverage Container Product Category" to the Recycling Regulation (B.C. Reg. 449/2004) of the Environmental Management Act.
7. Yard Waste.
8. Food Waste.
9. Clean Wood Waste.

SCHEDULE G
PRODUCT STEWARDSHIP MATERIALS

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

1. The following materials pursuant to Schedule 2 - Residual Product Category to the Recycling Regulation:
 - i) Solvents and flammable liquids,
 - ii) Pesticides,
 - iii) Gasoline,
 - iv) Pharmaceutical products and medications,
 - v) Oil, oil filters and oil containers,
 - vi) Paint,
 - vii) Lead-acid batteries, and
 - viii) Antifreeze and antifreeze containers.
2. Electronics and electrical products, including metal household and commercial appliance, as identified in Schedule 3 - Electronics and Electrical Products Category to the Recycling Regulation.
3. Tires pursuant to Schedule 4 - Tire Product Category to the Recycling Regulation.

EXPLANATION

**Solid Waste By-law No. 8417
Amending By-law regarding miscellaneous amendments,
street cleaning, billing and fees**

On December 7, 2016, Council approved proposed amendments to the Solid Waste By-law regarding miscellaneous amendments, street clean, billing and fees. Enactment of the attached By-law will implement Council's resolution.

Director of Legal Services
December 13, 2016