



ADMINISTRATIVE REPORT

Report Date: December 2, 2014
Contact: Albert Shames
Contact No.: 604.873.7300
RTS No.: 10714
VanRIMS No.: 08-2000-20
Meeting Date: December 16, 2014

TO: Vancouver City Council
FROM: General Manager of Engineering Services
SUBJECT: Annual Review of the Solid Waste Utility and 2015 Rates

RECOMMENDATION

- A. THAT Council approve the amendments to the Solid Waste By-law, generally as set out in Appendix B, including the establishment of the 2015 rates and fees.
- B. THAT Council instruct the Director of Legal Services to bring forward for enactment revisions to the Solid Waste By-law to adjust rates and fees as described in Recommendation A and miscellaneous related amendments substantially as referred to in these recommendations and as substantially set out in Appendix C.

REPORT SUMMARY

The purpose of this report is to obtain Council authority to set 2015 solid waste utility rates and fees and amend the Solid Waste By-law.

The solid waste utility rates and fees collected support the garbage, green bin and recycling collection services of the City of Vancouver. For garbage and green bin collection the fees also include the cost of waste disposal and green bin material processing for the materials collected. In 2015, for the average single family home, the recommended rate changes will result in an increase of \$8 or 3.0% to the total rate paid for collection services.

Table 1 - 2015 Utility Rates for the Average Single Family Home

Collection Rates for the Average Single Family Home	2014 Budget	2015 Proposed	% Increase	2016 Outlook	% Increase
Annual Rates					
Garbage	\$ 104	\$ 110	6.4%	\$ 112	1.6%
Green Bin	125	136	8.1%	138	1.7%
Subtotal	229	246	7.3%	250	1.6%
Recycling	27	18	-33.3%	18	0%
Total	\$ 256	\$ 264	3.0%	\$ 268	1.5%

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.

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 to comply with the Metro Vancouver ban on disposal of these materials at the landfill or incinerator, which comes into effect on January 1, 2015.

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

CITY MANAGER'S/GENERAL MANAGER'S COMMENTS

The City Manager and General Manager of Engineering Services RECOMMEND approval of recommendations A and B.

REPORT

Background/Context

City of Vancouver's Waste Management and Resource Recovery System

The City of Vancouver's waste management and resource recovery system includes collection services for garbage, green bin, and recycling, as well as transfer and disposal services and green bin material processing. The City's disposal systems consist of 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.

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 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 EnviroSMART in Delta and Harvest Power in Richmond.

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

Recycling

Recyclables collected by City staff and the City's multi-family recycling contractor are delivered to the City's recycling receiving yard on Kent Avenue, where they are consolidated and shipped to MMBC's designated processing facilities. Both the Transfer Station and Landfill have public recycling depots, operated by the City under contract to MMBC for printed paper and packaging. The City also collects scrap metal for recycling at the depots. Recyclables collected at these depots are shipped to recyclable material processors.

Landfill Regulatory Environment

The Landfill operates in accordance with an operational certificate issued by the Ministry of Environment. The certificate specifies management, operational and reporting requirements, including environment 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 Waste Management and Resource Recovery Division have resulted in significant strides towards achieving this target.

2014 Update

2014 was the first full year of operation for the City's green bin program and we saw an overall reduction in the City collected waste of 40% and an increase in City collected green bin material of 60%. In addition, the City established by-laws requiring development of food scraps recycling plans and programs in multi-family and commercial buildings and implemented a City-delivered green bin program for food scraps recovery from approximately 1,300 smaller multi-family buildings that already receive City garbage and/or yard waste collection.

The City fully transitioned to what is supposed to be a producer-pay system for recycling in 2014 and now acts as a contractor to Multi-Material BC (MMBC) to collect recycling for residents within the City. As part of the transition to an MMBC-controlled program, City staff expanded the scope of material collected in the recycling system. MMBC's financing of the City's recycling service benefits ratepayers by reducing the costs charged to them. In 2014, this financing covered about half the cost of the City's recycling service; in 2015, it will cover approximately two-thirds.

In a further effort to reduce the amount of waste going to the landfill, regulations were established to promote recycling of materials in the demolition of pre-1940 homes and to encourage deconstruction as a method of demolition.

At the landfill, the City continued efforts to upgrade, improve, and increase landfill gas collection and develop strategies for the beneficial use of additional landfill gas.

In late 2014, the Province rejected Metro's proposed by-law (By-law 280) to regulate the flow of waste in the region. This by-law would have required waste generated within the region to be disposed of in the region. As a result of the Province's decision, Metro Vancouver's Integrated Solid Waste and Resource Management Plan and corresponding plans to develop a new waste-to-energy facility are under review. One of the most significant consequences of this decision is that there are now no restrictions on where Commercial waste goes for disposal.

Over the past few years there has been an increasing amount of waste migrating out of the Metro system to disposal sites primarily in the United States. There are 2 primary causes for this migration; increasing tipping fees for disposal of waste within the metro system, and more restrictions on what can be disposed through expanding material disposal bans. The net result of this migration is that the amount of commercial waste in the system is decreasing and the corresponding revenues to support system operations are diminishing. For the City this loss of tonnage and revenue means that system costs are spread over a smaller number of users and as a result the per tonne costs that need to be charged to support the system go up.

The tipping fees at the landfill and transfer station cover the costs of operating the facilities as well as the contribution to the long term closure reserve for the landfill. The long term closure reserve needs to cover the cost of final closure of the landfill in 2038 plus a minimum of 25 years of post-closure monitoring and maintenance as required by provincial regulation. City and Metro staff are currently working together to review the impacts of current and potential future changes in commercial tonnage and revenues, as well as longer term strategies to support the system as a whole. It is expected that this review will be completed in the first quarter of next year.

2015 Plans

As a result of the Province's rejection of Metro's bylaw 280, the future of solid waste services provided in the region is uncertain. In addition to the financial pressures this puts on the Region through increased migration of waste, it also puts in jeopardy the development of zero waste programs in the multi-family and commercial sectors which are much larger producers of garbage than is the single family sector. As a consequence, it is vital that Metro quickly work to develop a revised waste/resource management plan and work with waste collectors and haulers in the region to find a more financially sustainable approach to achieve zero waste targets. Vancouver staff will continue to support Metro in this work.

In addition to this overarching structural issue, in 2015 we will undertake the following as we strive to achieve waste diversion:

- Provide appropriate support to ensure the development of organics collection programs in multi-family, commercial and industrial buildings that do not receive City collection services;
- Implement programs at the landfill and transfer station to divert clean wood waste in order to support Metro's disposal ban which will be in effective January 1, 2015;
- Expand opportunities for the beneficial use of collected landfill gas at the Vancouver Landfill;
- Assess the impacts and benefits of the transition to an MMBC-controlled recycling program;
- Address access challenges at the Landfill from the new South Fraser Perimeter Road;
- Address access, traffic and space problems at the Transfer Station; and
- Introduce new compressed natural gas ("CNG") trucks for the garbage and green bin collection programs to reduce fuel consumption and greenhouse gas generation.

Service Metrics

Collection Services (Garbage, Green Bin and Recycling)

The increase in green bin material and decrease in garbage is primarily as result of a full year of operation of the single-family green bin program and the change to weekly green bin and biweekly garbage collection in as well as the expansion of that program to multi-family dwellings in 2014. The effects of these changes are shown in Table 2.

Table 2 - Collection Services Metrics

Service	Metric Type	COV Metric	2010	2011	2012	2013	2014F
Garbage, Recyclables and Organic Collection	Quantity	# of metric tonnes collected via residential collection programs (i.e. garbage, recycling, green bin material)	117,133	117,566	119,877	114,327	113,900
		# of carts served all types	197,546	197,611	198,411	200,826	201,900
		% green bin material	20.4%	21.6%	22.7%	34.0%	39.5%
		% garbage	53.7%	52.5%	51.4%	39.2%	33.4%
		% recycling	25.9%	25.9%	25.9%	26.8%	27.1%
	Quality	% of total collections which are missed (311)	0.20%	0.20%	0.20%	0.23%	0.20%

Disposal Services (Landfill and Transfer Station)

The number of tonnes disposed of at the Landfill has dropped due not only to increased food scraps recycling across the region, but also to the migration of commercial garbage out of the regional solid waste system to lower cost facilities with less restrictions on the types of materials disposed.

Landfill gas collection has improved as a result of the construction of new landfill gas works and infrastructure over the past three years, shown in Table 3.

Table 3 - Disposal Services Metrics

Service	Metric Type	COV Metric	2010	2011	2012	2013	2014F
Transfer and Landfill	Quality	% of total landfill gas collected	52%	40%	52%	60%	65%
	Quantity	Total # tonnes of garbage disposed of at the Vancouver Landfill	580,300	665,000	716,300	601,202	555,800

Financial Implications

The solid waste utility has two distinct services: the services provided to Vancouver residents for collection and management of residential garbage, green bin and recycling, recovered through utility fees and the disposal services provided to others recovered through the tipping fees charged at the transfer station and landfill. This report seeks approval for the 2015 solid waste collection rates and fees; however, for context it provides financial information about the entire solid waste utility. Table 4 shows the 2014 forecast, 2014 budget, and 2015 proposed budget for the solid waste utility as a whole.

Table 4 - Operating Statement for the Solid Waste Utility

Solid Waste Utility	2014 Forecast	2014 Budget	2015 Proposed	2014B/15 \$ Change	2014B/15 % Change
\$ millions					
Revenues					
Collection Services	\$33.0	\$32.6	\$35.0	\$2.4	7%
Disposal Services	29.4	31.1	28.6	(2.5)	-8%
Total Revenues	62.4	63.7	63.6	(0.1)	0%
Expenses					
Salaries & Benefits	20.5	19.6	20.8	1.2	6%
Equipment & Fleet	15.0	15.3	14.8	(0.5)	-3%
Contracted Services	6.3	6.6	6.2	(0.4)	-6%
Regional Utility Charges	4.4	4.4	4.0	(0.4)	-9%
Other Expenses	3.5	3.8	4.2	0.4	11%
Supplies & Materials	2.2	2.2	2.4	0.2	9%
Building Occupancy & Maint.	1.8	1.8	1.9	0.1	4%
CFF Loan Repayments	1.6	2.8	2.9	0.1	3%
Internal Allocations	1.3	1.3	1.8	0.5	40%
Other Transfers	0.3	0.3	0.3	-	0%
Total Expenses	56.9	58.1	59.3	1.2	%
Operating Surplus/(Deficit)	5.5	5.6	4.3	(1.3)	%
Transfer to Reserve	(5.5)	(5.6)	(4.3)	1.3	%
Surplus/(Deficit) After Transfers	\$ -	\$ -	\$ -	\$ -	0%

Overall, the revenues for the solid waste utility are expected to decrease in 2015 by \$0.1M due to a \$2.5M decrease in disposal revenue as a result of fewer tonnes and therefore lower tipping fee revenue at the Transfer Station and Landfill. This decrease is offset by a net increase in collection revenue of \$2.4M largely due to a full year of MMBC recycling revenue.

The expenditures in 2015 increase by \$1.2M largely due to the increase in salary from the forecasted increases in compensation and the inclusion of Green Bin support positions previously considered a project cost as part of the operating budget. Other significant changes include an increase in internal allocations to support increased use of the City's 311 service by residents as a result of increased system complexity offset by a decrease in equipment costs.

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

Collection Services (Garbage, Green Bin and Recycling)

Labour and equipment costs are key cost drivers of the collections operation. The majority of collection services (all single family and approximately 1,300 multi-family buildings) are performed by City crews. The City contracts with the private sector for the collection of recyclables from multi-unit residential buildings in the Downtown, False Creek, and Kitsilano

areas. Commercial, institutional and industrial collection is not overseen by the City but arranged privately by business operators.

Table 5 shows the forecasted financial results of the collection services for 2014 and the proposed budget for 2015. For further detail and a split by expenditure type, please refer to supplementary table A.1 in Appendix A.

Table 5 - Operating Statement for Solid Waste Collection

Solid Waste Collection Services	2014 Forecast	2014 Budget	2015 Proposed	2014B/15 \$ Change	2014B/15 % Change
\$ millions					
Revenues					
Annual Collection Fees	\$ 27.6	\$ 27.1	\$ 26.8	\$ (0.3)	-1%
MMBC Recoveries (Recycling)	5.1	5.2	8.2	3.0	58%
Sale of Recyclables & Other	0.3	0.3	-	(0.3)	-100%
Total Revenues	33.0	32.6	35.0	2.4	7%
Expenses					
Garbage Collection	6.3	6.4	6.8	0.4	6%
Garbage Disposal, at cost	3.7	3.4	3.8	0.4	12%
Green Bin Collection	10.9	11.1	12.1	1.0	9%
Recycling Collection	10.0	9.7	9.9	0.2	2%
MMBC-Related Expenses	1.0	2.0	2.4	0.4	20%
Total Expenses	31.9	32.6	35.0	2.4	7%
Operating Surplus/(Deficit)	1.1	-	-	-	0%
Transfer to Reserve	(1.1)		-	-	0%
Surplus/(Deficit) After Transfers	\$ -	\$ -	\$ -	\$ -	0%

For 2014, collections costs are expected to be approximately \$0.7 million lower than budget, largely due to a delay in implementing MMBC-related communications and collections changes. Revenue is expected to be approximately \$0.4 million higher than budget, largely due to residents' switching to larger garbage cart sizes because of the City's move to bi-weekly garbage collection.

The 2015 revenue budget reflects the first full year of the MMBC contract for residential recycling collection. The City will receive approximately \$8.2 million in cost recoveries based on the financial terms of the MMBC agreement which represents a \$3.0 million increase over 2014 and will result in less funding required from ratepayers through annual collection fees since revenue comes directly from MMBC.

Overall, expenditures in 2015 are expected to increase by \$2.4 million largely due to the following:

- Forecasted City labour compensation increases of 2%;
- The first full year implementation of green bin support staff, who perform inspections and provide customer support in order to improve program participation and help the City avoid financial penalties or rejection of loads by processors due to high contamination rates;
- An increase in the portion of 311 costs to support solid waste based on number and length of calls related to the utility
- An increase in the residents' share of Transfer Station and Landfill costs due to the migration of commercial waste out of the Metro Vancouver system which results in a higher per tonne operating cost of the system
- The need to address contractual requirements of the MMBC program, including separate glass collection as well as material volume increases due to the expansion of the range of materials accepted. We have noticed an increase in volume of approximately 15% in the overall materials collected primarily due to the addition of a number of high volume low weight materials. This has resulted in volume pressures on the system and a need for additional rented trucks to manage the increase; and

The start of repayment of the \$4.8M Capital Financing Fund ("CFF") loan used to fund the start-up phase of the single-family green bin program. In mid-2013, the City implemented full food scraps recycling, including a switch to weekly collection of green bins and every-other-week collection of garbage for single-family and duplex homes supported by a comprehensive communications campaign. The repayment is charged 50/50 to garbage and green bin collections.

In early 2015, the City will receive new CNG trucks for the garbage and green bin collection programs. The implementation in Q2 of the trucks has resulted in some temporary relief on monthly payments for equipment in 2015 and once the switch to CNG trucks is fully implemented, the City is expected to achieve further savings on fuel.

Disposal Services (Landfill and Transfer Station)

Table 6 shows the forecasted operating results of the Landfill and Transfer Station for 2014 and the budgets for 2014 and 2015. For further detail and a split by expenditure type, please refer to supplementary table A.2 in Appendix A.

Table 6 - Operating Statement for the Transfer Station and Landfill

Solid Waste Disposal Services	2014 Forecast	2014 Budget	2015 Proposed	2014B/15 \$ Change	2014B/15 % Change
\$ millions					
Revenues					
Tipping Fees	\$ 25.6	\$ 30.0	\$ 25.2	\$ (4.8)	(17%)
Metro & Delta's Share	0.6	(2.4)	0.3	2.7	(-117%)
Vancouver Residents' Disposal	3.7	3.4	3.8	0.4	12%
Other	3.2	3.5	3.1	(0.4)	(-11%)
Total Revenues	33.1	34.5	32.4	(2.1)	(8%)
Expenses					
Transfer Station	7.4	7.6	7.3	(0.3)	(4%)
Landfill	21.3	21.3	20.8	(0.5)	(2%)
Total Expenses	28.7	28.9	28.1	(0.8)	(5%)
Operating Surplus/(Deficit)	4.4	5.6	4.3	(1.3)	(23%)
Transfer to Reserve	(4.4)	(5.6)	(4.3)	1.3	(23%)
Surplus/(Deficit) After Transfers	\$ -	\$ -	\$ -	\$ -	0%

For 2014, costs at the Transfer Station are expected to be lower than budget, mainly due to reduced repairs and maintenance expense for transfer trucks and trailers which were replaced in June 2013. These savings are expected to continue into 2015. Landfill expenses are expected to be on budget.

In 2015, Metro Vancouver will increase the tipping fee for garbage from \$108 per tonne to \$109 per tonne and for green waste fee from \$65 per tonne to \$66 per tonne. (Detailed rate changes are listed in Appendix B.) Staff expect that disposal revenue will continue to decline in 2015, primarily due to increased migration of some multi-family, commercial, industrial and institutional waste out of the regional system given the Province's rejection of By-law 280.

Staff recommend increasing the disposal rate for demolition, land clearing, and construction (DLC) waste from \$50 per tonne to \$60 per tonne in 2015. This increase will bring the City more in line with the current market rate for DLC waste charged at private sector facilities. For 2015, Transfer Station and Landfill expenses are expected to be \$24.3 million, a \$1.2 million decrease from 2014. This difference is primarily due to two reasons. First, there is an expected savings on fuel for Transfer Station and Landfill equipment. Second, the City plans to begin closing the Transfer Station and Landfill on selected statutory holidays.

Currently, the Transfer Station and Landfill are open every day of the year except for Christmas and New Year's Day. On all other statutory holidays, both facilities are open and operating staff are paid overtime for every hour they work. On some of these statutory holidays, traffic is so low that it would be less expensive to close than to remain open and pay staff overtime. Staff propose closing the Transfer Station and Landfill on such holidays

starting in 2015. This change will result in savings of up to \$224,000 per year in staffing and fuel costs.

Due to the migration of waste out of the regional systems and the corresponding decline in tipping fee revenue, the 2014 transfer to the Solid Waste Capital Reserve (SWCR) is expected to be \$4.4 million, which is \$1.2 million lower than budget. Staff estimate that the 2015 transfer will be \$5.5 million. Table 7 projects the changes to the SWCR over the next four years.

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

Solid Waste Capital Reserve						
4-Year Projection	2013	2014	2015	2016	2017	2018
\$ millions						
Opening Balance	\$ 75.8	\$ 68.8	\$ 76.8	\$ 78.8	\$ 83.9	\$ 68.2
Annual Contribution to Reserve	7.1	5.5	4.3	4.3	4.3	4.3
Interest	1.4	1.4	1.5	1.6	1.5	1.3
Metro Vancouver Cost Sharing	3.4	4.8	0.9	1.2	0.5	5.6
Gross Landfill Phased Closure Costs	(18.9)	(3.7)	(4.7)	(2.0)	(22.0)	(22.0)
Closing Balance	\$ 68.8	\$ 76.8	\$ 78.8	\$ 83.9	\$ 68.2	\$ 57.4

This projection maintains the transfer to the Solid Waste Capital Reserve steady at \$4.3 million per year. In order for this to happen, disposal volumes must stabilize and tipping fee revenues will need to recover by approximately 2% per year. It is recognized that due to the recent rejection of By-Law 280 there is significant uncertainty regarding these assumptions.

Based on these same broad assumptions, Table 8 shows the four-year outlook for the solid waste utility as a whole.

Table 8 - Four-Year Outlook for the Solid Waste Utility

Solid Waste Utility 4-Year Outlook	2015	2016	2017	2018
\$ millions				
Revenues				
Disposal Revenues	\$ 28.3	\$ 28.8	\$ 29.3	\$ 29.9
Less: Metro & Delta's Share	0.3	0.4	0.4	0.4
Collection Revenues	35.0	35.7	36.6	37.5
Total Revenues	63.6	64.9	66.3	67.8
Expenses				
Disposal Services	24.3	24.8	25.4	26.0
Collection Services	35.0	35.8	36.6	37.5
Total Expenses	59.3	60.6	62.0	63.5
Operating Surplus/(Deficit)	4.3	4.3	4.3	4.3
Transfers				
Funding from CFF	-	-	-	-
Transfer to Reserve	(4.3)	(4.3)	(4.3)	(4.3)
Total Transfers	(4.3)	(4.3)	(4.3)	(4.3)
Surplus/(Deficit) After Transfers	\$ -	\$ -	\$ -	\$ -

The net effect of the collections and program changes discussed in this report is an \$8 increase to the total fee paid for garbage, green bin, and recycling collection by the average single-family home.

Legal Implications

The current version of the Solid Waste By-law requires updating to support the changes that have occurred over the past few years. 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 rate and fee changes, this report recommends Solid Waste By-law amendments including:

- Adding clean wood waste to the list of materials banned from disposal as required by Metro for January 1, 2015;
- Implementing disposal thresholds of 25% for food waste and 10% for clean wood waste with surcharges starting July 1, 2015. Compliance will be monitored and surcharges applied at the point of disposal; and
- Modifying banned materials lists and terminology and organizing them into three categories: Banned Hazardous Materials, Banned Recyclable Materials, and Banned Product Stewardship Materials.

To align the City's practices with MMBC's requirements, proposed amendments also expand the list of recyclable materials collected from residential properties and modify recycling

collection service to synchronize it with multiple MMBC recycling collection contractors serving MURB buildings. A draft of Solid Waste By-law amendments is provided in Appendix B.

CONCLUSION

Based on the budgeted 2015 expenditures, staff recommend that the solid waste utility rates and by-law changes described in this report be adopted for 2015.

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Supplementary Tables

Table A.1 - Operating Statement for Solid Waste Collection - Expenses by Type of expense

Solid Waste Collection Service	2014 Forecast	2014 Budget	2015 Proposed	2014B/15 \$ Change	2014B/15 % Change
\$ millions					
Revenues					
Annual Collection Fees	\$ 27.6	\$ 27.1	\$ 26.8	\$ (0.3)	-1%
MMBC Recoveries (Recycling)	5.1	5.2	8.2	3.0	58%
Sale of Recyclables & Other	0.3	0.3	-	(0.3)	-100%
Total Revenues	33.0	32.6	35.0	2.4	7%
Expenses					
Salaries & Benefits	9.6	9.1	10.3	1.2	13%
Equipment & Fleet	7.6	7.3	7.7	0.4	6%
Contracted Services	4.8	5.0	4.6	(0.4)	-8%
Regional Utility Charges	0.3	0.4	0.4	-	-5%
Other Expenses	1.9	2.7	3.1	0.4	16%
Supplies & Materials	0.4	0.3	0.5	0.2	44%
Building Occupancy & Maint.	-	-	-	-	0%
CFF Loan Repayments	1.0	1.4	1.8	0.4	28%
Internal Allocations	6.1	6.2	6.4	0.2	4%
Other Transfers	0.2	0.2	0.2	-	0%
Total Expenses	31.9	32.6	35.0	2.4	7%
Operating Surplus/(Deficit)	1.1	-	-	-	0%
Transfer to Reserve	(1.1)				0%
Surplus/(Deficit) After Transfers	\$ -	\$ -	\$ -	\$ -	0%

Table A.2 - Operating Statement for the Transfer Station and Landfill - Expenses by Type of expenses

Solid Waste Disposal Service	2014 Forecast	2014 Budget	2015 Proposed	2014B/15 \$ Change	2014B/15 % Change
\$ millions					
Revenues					
Tipping Fees	\$ 25.6	\$ 30.0	\$ 25.2	\$ (4.8)	(17%)
Metro & Delta's Share	0.6	(2.4)	0.3	2.7	(-117%)
Vancouver Residents' Disposal	3.7	3.4	3.8	0.4	12%
Other	3.2	3.5	3.1	(0.4)	(-11%)
Total Revenues	33.1	34.5	32.4	(2.1)	(8%)
Expenses					
Salaries & Benefits	10.9	10.5	10.5	(0.1)	-1%
Equipment & Fleet	7.4	8.0	7.1	(0.9)	-11%
Contracted Services	1.5	1.6	1.6	-	2%
Regional Utility Charges	4.0	4.0	3.6	(0.4)	-9%
Other Expenses	1.8	1.1	1.1	-	0%
Supplies & Materials	1.8	1.9	1.9	-	2%
Building Occupancy & Maint.	1.8	1.8	1.9	0.1	4%
CFF Loan Repayments	0.6	1.3	1.0	(0.3)	-21%
Internal Allocations	(1.1)	(1.4)	(0.7)	0.7	-50%
Other Transfers	0.1	0.1	0.1	-	0%
Total Expenses	25.0	28.9	28.1	(0.9)	(3%)
Operating Surplus/(Deficit)	4.4	5.6	4.3	(1.3)	(23%)
Transfer to Reserve	(4.4)	(5.6)	(4.3)	1.3	(23%)
Surplus/(Deficit) After Transfers	\$ -	\$ -	\$ -	\$ -	0%

Appendix B
Solid Waste By-Law No. 8417
2015 Rate Changes

Schedule A	Annual Collection Rates		
	2014	Proposed 2015	% Increase
<u>Garbage (Bi-weekly Collection)</u>			
Cans:			
Per stop	\$52	\$55	5.8%
Per can	\$26	\$26	0.0%
Cart Size:			
75 L	\$71	\$75	5.6%
120 L	\$83	\$87	4.8%
180 L	\$98	\$103	5.1%
240 L	\$113	\$119	5.3%
360 L	\$144	\$151	4.9%
<u>Garbage (Weekly Collection)</u>			
Cans:			
Per stop	\$71	\$74	4.2%
Per can	\$29	\$30	3.4%
Cart Size:			
75 L	\$92	\$97	5.4%
120 L	\$105	\$110	4.8%
180 L	\$122	\$128	4.9%
240 L	\$139	\$146	5.0%
360 L	\$173	\$182	5.2%
<u>Green Bin</u>			
Cart Size:			
120 L	\$96	\$104	8.3%
180 L	\$113	\$122	8.0%
240 L	\$130	\$140	7.7%
360 L	\$163	\$176	8.0%
<u>Recycling</u>			
Per stop	\$7	\$5	-28.6%
Per dwelling unit	\$20	\$13	-35.0%

Appendix B
Solid Waste By-Law No. 8417
2015 Rate Changes

Schedule B		Disposal Fees		
		20134	Proposed 2015	% Increase
<u>Waste Discharge</u>				
Municipal solid waste	per tonne	\$108	\$109	0.9%
Asbestos - residential	per tonne	\$108	\$109	0.9%
Asbestos - commercial	per tonne	\$158	\$159	0.6%
Demo	per tonne	\$50	\$60	20.0%
Burial charge	per burial	\$200	\$200	0.0%
<u>Waste Diversion</u>				
Yard trimmings	per tonne	\$65	\$66	1.5%
Clean wood waste	per tonne	\$65	\$66	1.5%
Drywall	per tonne	\$150	\$150	0.0%
Mattresses	per piece	\$15	\$15	0.0%
<u>Goods for Sale</u>				
Compost	per tonne	\$16	\$16	0.0%
	minimum fee	\$5	\$5	0.0%

BY-LAW NO. _____

**A By-law to amend
Solid Waste By-law No. 8417
regarding fees and waste disposal**

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

1. This By-law amends the indicated provisions of the Solid Waste By-law, No. 8417.
2. Council adds to section 2, the following definitions in alphabetical order:

“ “Asbestos Policy” means the Vancouver South Transfer Station & Vancouver Landfill Asbestos Policy in place to meet the requirements of Hazardous Waste Regulation (B.C. Reg. 63/88) and Occupational Health and Safety Regulation (B.C. Reg. 296/97),

“banned materials” means the Hazardous and Operational Impact Materials set out in Schedule D and Schedule E, recyclable materials set out in Schedule F, and the Product Stewardship Program Materials set out in Schedule G.

“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, gable-top paper containers such as milk cartons, or paper that is covered or infused with wax,

“source separated organic waste” means food waste, yard waste, clean wood waste not pierced with nails or other metal fasteners, tissue paper, paper napkins and towels, carbon paper, paper that is covered or infused with wax, food soiled recyclable paper, or any combination thereof,

“surcharge” means the cost 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.”

3. Council deletes the definitions of “clean wood waste” and “food waste” in section 2 and replaces those definitions with the following:

““clean wood waste” means solid wood, plywood, particle board or oriented Strand Board that is not painted, stained or treated with chemicals, and may or may not be pierced with nails or other fasteners” and

““food waste” means coffee grounds, coffee filters, tea bags, tea leaves, eggs, eggshells, dairy products, bread, baked goods, pasta, batter, dough, meat, poultry, fish, shellfish, bones, fat, shells, fruit, vegetables, grains, nuts, seeds, peelings, shells, oils, butter, sauces combined with foods, whether raw, cooked or processed, but excludes grease, diapers,, and liquid oils not combined with food,”

4. Council deletes subsection 4.2(5)(b).

5. Council deletes the current section 5.1 and replaces it with the following:

"5.1 Recycling Service

- (1) The owner or occupier of a house or strata duplex must use the recycling collection service provided by the City.
- (2) The owner or occupier of a rowhouse, apartment or rental apartment 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 the City's existing recycling services.
- (3) The owner or occupier of 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."

6. Council deletes subsection 6.6(d).

7. Council deletes the current section 7.4 and replaces it with the following:

"7.4 Materials Banned from Garbage Containers

Every owner or occupier of premises to which the City provides garbage collection service shall not cause, permit, or allow to be placed in a garbage cart or garbage can:

- (a) anything described in Schedule D and Schedule G of this By-law;
- (b) materials listed in Schedule F of this By-law, other than clean wood waste and food waste, comprising more than 5% by weight or by volume of total container capacity;
- (c) food waste comprising more than 25% by weight or by volume of the total container capacity;
- (d) clean wood waste comprising more than 10% by weight or by volume of the total container capacity."

8. Council deletes section 7.5 and renumbers section 7.6 as 7.5.

"SCHEDULE A

RATES FOR LANDFILL AND TRANSFER STATION

I. Drop-off Rates

The following rates apply to solid waste, yard waste and clean wood 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, yard waste and clean wood waste

Type of Waste	Rate	Peak hours minimum charge (from 10:00 a.m. to 2:00 p.m. Monday to Friday)	Non peak hours minimum charge (other than from 10:00 a.m. to 2:00 p.m. Monday to Friday)
Solid waste	\$109/tonne	\$20	\$10
Yard waste and clean wood waste	\$66/tonne	\$6	\$6

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

Where any portion of a load consists of recyclable materials which can be deposited separately for recycling, for that portion No Charge

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 \$60 per tonne

Mattresses deposited for recycling \$15/piece

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

All other asbestos waste..... Solid waste Rate + \$50/tonne + Special disposal fee

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 as of July 1, 2015, 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 as of July 1, 2015, 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 clean wood 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 one or more materials listed in Schedules E and G, a \$50.00 surcharge will be applied to the load plus removal and remediation costs where applicable.

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

"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	\$97
120 litres	\$87	\$110
180 litres	\$103	\$128
240 litres	\$119	\$146
360 litres	\$151	\$182

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	\$52.00
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	\$27.00
weekly collection	\$30.00

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 each dwelling unit (recycling cart located within 50 m pursuant to section 5.6 (1) of this By-law..... \$18.00
except where one or more common collection points, at locations agreed to by the City Engineer are serviced the rate shall be, for each dwelling unit \$13.00
plus for each collection point where service is provided \$5.00

B. Additional Carryout Charges

For buildings which receive recycling cart service the following additional charges apply:

for distances greater than 50 m but less than 100 m \$ 80.00 per cart
for distances of 100 m or greater but less than 150 m..... \$180.00 per cart

for distances of 150 m or greater \$320.00 per cart

C. Additional Storage Charges

For those properties which store recycling carts on streets or lanes.....\$74.29 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	\$104
180 litres	\$122
240 litres	\$140
360 litres	\$176

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."

"SCHEDULE C

MATERIALS ACCEPTED IN BLUE BOX
RECYCLING CONTAINERS AND RECYCLING CARTS

1. Printed Papers, including:
 - i) Newspapers, inserts and flyers,
 - ii) Magazines and catalogues,
 - iii) Telephone directories,
 - iv) Paper gift wrap and greeting cards,
 - v) Household paper (including junk mail, envelopes, writing paper and computer paper).
2. Corrugated Cardboard.
3. Paper Packaging (containing dry items when sold), including:
 - i) Boxboard,
 - ii) Moulded pulp,
 - iii) Paper bags.
4. Paper Packaging (containing liquids when sold), including:
 - i) Paper cups and lids,
 - ii) Polycoated cartons and aseptic containers for milk, milk substitutes, cream and soup,
 - iii) Multi-laminated paper packaging (including frozen dessert boxes and microwaveable bowls and cups).
5. 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 #3 (Polyvinyl Chloride or PVC) or SPI Code #4 (Low Density Polyethylene or LDPE) or SPI Code #5 (Polypropylene or PP) or SPI Code #6 (Polystyrene or PS) or SPI Code #7 (Other) or without a SPI resin code.
6. Metal Packaging:
 - i) Ferrous and non-ferrous metal cans (non-beverage);
 - ii) Spiral wound paper cans and lids (metal ends);
 - iii) Aluminum foil and foil containers;
 - iv) Aluminum aerosol cans (including food spray cans, air fresheners, deodorant and hairspray).
7. Glass Packaging, including:
 - i) Glass bottles and jars (non-deposit)."

"SCHEDULE D

**HAZARDOUS AND OPERATIONAL IMPACT MATERIALS
BANNED FROM GARBAGE CONTAINERS**

1. Refuse that is on fire, smoldering, flammable or explosive.
2. 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.
3. Propane tanks.
4. Liquids or sludge.
5. 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.
6. Dead animals.
7. Excrement, other than amounts of pet excrement that are double bagged and discarded with garbage and that do not exceed either 5% of the total weight of the container or 5% of the total volume of the container.
8. Barrels, drums, pails or other large (205 litre or greater) liquid containers, whether full or empty.
9. Gypsum (drywall) or gypsum containing asbestos.
10. Mattresses.
11. 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.
12. Any other material which the City Engineer or Medical Health Officer considers hazardous or unsuitable to handle."

"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;
8. 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;
9. Barrels, drums, pails or other large (205 litre or greater) liquid containers, whether full or empty;
10. Any single object that:
 - a. weighs more than 100 kilograms, or
 - b. exceeds 0.35 square metres in cross section at any point, or
 - c. exceeds 1.2 metres in width and/or 2.5 metres in length, or
 - d. exceeds 3 cubic metres in volume.
11. Gypsum (drywall) or gypsum containing asbestos.
12. Mattresses.
13. 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.
14. Any other material deemed by the City Engineer as unacceptable for disposal at the Vancouver Landfill or Vancouver South Transfer Station."

"SCHEDULE F

BANNED RECYCLABLE MATERIALS

1. Printed Papers including:
 - i) Newspapers, inserts and flyers,
 - ii) Magazines and catalogues,
 - iii) Telephone directories,
 - iv) Paper gift wrap and greeting cards,
 - v) Household paper (including junk mail, envelopes, writing paper and computer paper).
2. Corrugated Cardboard.
3. Paper Packaging (containing dry items when sold) including:
 - i) Boxboard,
 - ii) Moulded pulp,
 - iii) Paper bags.
4. 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).
5. Metal Packaging including:
 - i) Ferrous and non-ferrous metal cans (non-beverage),
 - ii) Aluminum foil and foil containers.
6. Glass Packaging including:
 - i) Glass bottles and jars (non-deposit).
7. Yard Waste
8. Beverage containers identified in "Schedule 1 – Beverage Container Product Category" to the Recycling Regulation (B.C. Reg. 449/2004) of the Environmental Management Act.
9. Clean Wood Waste.
10. Food Waste."

**“SCHEDULE G
BANNED 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;
 - 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,
2015 rates and miscellaneous amendments**

On December 16, 2014, Council approved amendment of the By-law to change rates for 2015, and to implement new rules regarding disposal of wood waste, food waste and other waste. Enactment of the attached By-law will implement Council's resolution.

Director of Legal Services
December 16, 2014