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For P&E Committee – March 5, 2009

Supports Item No. 7
P&E Committee Agenda
March 5, 2009

CITY OF VANCOUVER

ADMINISTRATIVE REPORT

Report Date:	March 3, 2009
Contact:	Chris Underwood
Contact No.:	604.873.7992
RTS No.:	7847
VanRIMS No.:	08-2000-20
Meeting Date:	March 5, 2009

TO: Standing Committee on Planning and Environment

FROM: General Manager of Engineering Services

SUBJECT: Report Back: Award for Expression of Interest PS08182 Collection of Recyclable Materials from Multi-Family Buildings

RECOMMENDATION

A. THAT, subject to the conditions set out in Recommendations C, D and E, Council authorize the General Manager of Engineering Services to enter into an agreement with Waste Management of Canada for Collection of Recyclable Materials from Multi-Family Buildings in the contracted areas (Area I, II and III) for a period of five (5) years at an estimated annual cost of $1.96 million plus GST with a subsequent renewal option for up to one (1) additional two (2) year period.

B. THAT, subject to the conditions set out in Recommendations C, D and E, Council authorize the General Manager of Engineering Services to enter into an agreement with Waste Management of Canada to begin Collection of Recyclable Materials from Multi-Family Buildings in Area II on May 1, 2009 rather than August 1, 2009 at an estimated additional cost of $75,000.

C. THAT, the Director of Legal Services be authorized to execute and deliver on behalf of the City all legal documents required to implement Recommendations A and B.

D. THAT, all such legal documents be on terms and conditions satisfactory to the General Manager of Engineering Services and the Director of Legal Services.

E. THAT, no legal rights or obligations will be created by Council's adoption of Recommendation A, B, C and D above unless and until such legal documents are executed and delivered by the Director of Legal Services.

CITY MANAGER'S COMMENTS

The City Manager RECOMMENDS approval of A-E.

COUNCIL POLICY

On April 28, 1998, Council approved implementation of the Apartment Recycling Program using both private and City collection services.

The policy of Council is to secure contracts for the purchase of equipment, supplies and services that will give the best value, based on quality, service and price.

Contracts with a value over $300,000 are referred to Council for award.

PURPOSE

The purpose of this report is seek council's authorization to award a contract for the collection of recycling materials from multi-family buildings, and to provide Council with additional information to assist with a decision.

BACKGROUND

At the February 19, 2009 City Services & Budgets Committee meeting, a report was presented (Appendix A) from staff recommending award of a contract to Waste Management of Canada for the collection of recyclable materials from multi-family buildings in three areas of the city currently under contract.

Approximately 40 % of all residential dwelling units in Vancouver are located within the contracted portion of the Apartment Recycling Program (ARP). Waste Management has proposed a total annual price of approximately $1.96 million, equivalent to $20.38 per dwelling unit per year, for a five year contract.

Council deferred a decision on this matter until staff reported back with information on:

- the possibility of completing some or all of the work using City forces;
- the flexibility of awarding a contract;
- alternative collection delivery models, including automated or not, commingled or source separated, and possible changes to all city-wide collection services.

DISCUSSION

Opportunity to expand portion of ARP serviced by City forces:

About 160,000 dwelling units (60 % of total) are serviced by City forces. We (City forces) do not have enough equipment to service any or all additional areas in the ARP (i.e. up to an additional 96,000 units) for five years. The usual time required to purchase new trucks ranges from 12 to 18 months. New collection vehicles have been ordered to replace existing fleet, but that equipment will be fully allocated to existing areas serviced by City forces. Continued utilization of the current fleet due for replacement is uneconomical.

The private contractor proposed lowest bid has been compared to the cost if City forces serviced some or all of the contract areas. We have concluded that the most economical option is to award the work to Waste Management of Canada.

Contract award flexibility:

The existing recycling collection contract ends April 30, 2009 for Areas I and III, and July 31, 2009 for Area II. Time is of the essence with deciding on the award of a contract. Lead time is required by the contractor for organizing equipment and securing human resources necessary to meet the City's performance expectations.

Alternative collection delivery options:

There are limited alternatives available for collecting recyclable materials. Options include fully automated, semi-automated or manual collection of separated or commingled materials.

In 2008 staff completed a comprehensive assessment of costs and the performance of various recycling collection program models, relative to Vancouver's current system of collecting three streams of materials sorted at curbside. A detailed summary of findings (updated for this report) is included in Appendix B.

Various advantages and disadvantages with automated commingled (single stream) and semi-commingled (dual stream) collection configurations were identified. Based on research and analysis we concluded that with automated single stream systems, costs associated with collection operations are normally less, but total net program costs are greater compared to multi-stream sort at curbside programs. Higher overall costs are experienced with commingled collection programs due to increased processing and marketing costs, and reduced commodity revenues. Commingled systems result in diminished recycling potential and a greater amount of material that is rejected as residual compared to multi-stream collection systems. Challenges with marketing material originating from commingled recycling programs (i.e. achieving success in diverting the commodity from disposal) are also exacerbated during times of poor economic conditions.

Our current system involving the collection of three streams of materials separated at curbside maximizes the recycling potential of the materials and the associated return of revenue from the recycling commodities. Also, the current method of collecting recyclable materials from multi-family properties is semi-automated and therefore provides a benefit in terms of reducing worker injury potential compared to strictly manual systems.

Overall, we have concluded that based on current available technology our existing system best satisfies the fundamental purpose of providing recycling programs (i.e. conserve resources and divert materials from disposal), which from a global sustainability perspective is superior over other factors when alternative collection methods are considered. With this in mind our current recycling system provides the best opportunity for:

- helping Vancouver become the greenest City in the world,
- meeting aggressive regional waste diversion goals, and
- conserving landfill capacity.

Nevertheless, recognizing that more advanced processing technologies and local capacity may eventually become available, and appreciating the operational benefits afforded by

automated collection systems, staff will continue to monitor industry developments for the purpose of identifying new opportunities the City may wish to consider in the future.

FINANCIAL IMPLICATIONS

The 2009 Solid Waste Utility (SWU) user fees were approved by Council on October 30, 2008. The Recycling Program fees for 2009 were set based on the $0.64 million per year cost of the existing contract in Areas I, II & III. The recommended proposal from Waste Management of Canada for Areas I, II & III is estimated to cost $1.96 million per year. The increase of approximately $1.32 million per year itself will result in a recycling user fee increase of about $5 per year per customer starting in 2010.

For 2009, staff estimates that the new contract costs will exceed the budgeted amount by about $0.88 million. This budget variance (along with the anticipated deficit due to a steep drop in recyclable commodity prices) will be addressed in the 2010 SWU User Fee Report that Council will receive at the end of 2009. In keeping with the self-funding principle of the Solid Waste Utility, it is anticipated that staff will recommend that the 2009 deficit be recovered through the annual SWU user fees in the following one to two year period. And in keeping with the policy of funding SWU user fee deficits, the 2009 deficit would be temporarily funded over the same 2010-2011 period from the Solid Waste Capital Reserve. The Reserve is sufficiently large to fund this deficit.

CONCLUSION

The General Manager of Engineering Services recommends acceptance of the response to Expression Of Interest PS08182 offering best value to the City and entering into an agreement with Waste Management of Canada for Collection of Recyclable Materials from Multi-Family Buildings in Areas I, II and III for a period of five (5) years at an estimated annual cost of $1.96 million.

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Supports Item No. 2
CS&B Committee Agenda
February 19, 2009

CITY OF VANCOUVER

ADMINISTRATIVE REPORT

Report Date:	February 9, 2009
Contact:	Bob McLennan
Contact No.:	604.873.7239
RTS No.:	7847
VanRIMS No.:	08-2000-20
Meeting Date:	February 19, 2009

TO: Standing Committee on City Services and Budgets

FROM: General Manager of Engineering Services

SUBJECT: Award for Expression of Interest PS08182 Collection of Recyclable Materials from Multi-Family Buildings

RECOMMENDATION

A. THAT, subject to the conditions set out in Recommendations C, D and E, Council authorize the General Manager of Engineering Services to enter into an agreement with Waste Management of Canada for Collection of Recyclable Materials from Multi-Family Buildings in the contracted areas (Area I, II and III) for a period of five (5) years at an estimated annual cost of $1.96 million plus GST with a subsequent renewal option for one (1) additional two (2) year period.

B. THAT, subject to the conditions set out in Recommendations C, D and E, Council authorize the General Manager of Engineering Services to enter into an agreement with Waste Management of Canada to begin Collection of Recyclable Materials from Multi-Family Buildings in Area II on May 1, 2009 rather than August 1, 2009 at an estimated additional cost of $75,000.

C. THAT, the Director of Legal Services be authorized to execute and deliver on behalf of the City all legal documents required to implement Recommendations A and B.

D. THAT, all such legal documents be on terms and conditions satisfactory to the General Manager of Engineering Services and the Director of Legal Services.

E. THAT, no legal rights or obligations will be created by Council's adoption of Recommendation A, B, C and D above unless and until such legal documents are executed and delivered by the Director of Legal Services.

CITY MANAGER'S COMMENTS

The City Manager RECOMMENDS approval of A-E.

COUNCIL POLICY

On April 28, 1998, Council approved implementation of the Apartment Recycling Program using both private and City collection services.

The policy of Council is to secure contracts for the purchase of equipment, supplies and services that will give the best value, based on quality, service and price.

Contracts with a value over $300,000 are referred to Council for award.

BACKGROUND

The City's Apartment Recycling Program (ARP) has been operating city-wide since 1999. The program includes apartment buildings, condominiums, row housing, townhouses as well as other multi-family buildings in the City.

On April 28, 1999 Council approved the ARP which included using private contractors and City crews for collection of recyclables. Prior to the ARP, private contractors serviced these apartments. When the City implemented the ARP, these private contractors objected to the City's involvement. To provide an opportunity for continued operation by private companies, Council approved implementation of the ARP using both private and City recycling collection services. Utilizing a contractor to provide recycling collection service to a portion of the residential sector also provides the City the opportunity to benchmark its performance and costs.

The ARP collection contract has been re-tendered every 5 years to ensure the City continues to receive best value.

Three (3) specific geographic areas of the City are being serviced by private contractors (shown in Appendix A). The three areas contain roughly 40% of residential dwelling units in Vancouver. Service to the remaining area of the city is provided by City of Vancouver forces.

The current recycling collection contract expires April 30, 2009 for Areas I and III, and July 31, 2009 for Area II.

DISCUSSION

On October 2, 2008 the City issued an Expression of Interest (EOI PS08182) for Collection of Recyclable Materials from Multi-Family Buildings in Areas I, II and III. Estimated prices were requested through the EOI. In addition to notifying the incumbent contractor to the City and other known contractors, the EOI was advertised on BC BID and the City's website.

Three (3) responses were received and opened on October 29, 2008 and referred to the General Manager of Engineering Services for evaluation and report. One of the responses did

not meet the scope of work requirements and was set aside. The two (2) remaining responses, from Halton Recycling Ltd. and Waste Management of Canada Inc., were evaluated by a three (3) person evaluation team. The responses were evaluated individually by team members and a composite score was assigned to each response based on team member scores.

The responses were evaluated based on the proponents' qualifications, experience and demonstrated abilities, understanding of the work, proposal details, cost and that which is considered to provide best overall value to the City. The evaluation team ranked the response from Waste Management of Canada highest.

Table 1. Expression Of Interest Pricing

Area	Approximate Number of Units	HALTON RECYCLING LTD. Proposed Annual Amount	WASTE MANAGEMENT OF CANADA, INC. Proposed Annual Amount
I	60,219	$1,278,449.37	$1,227,263.22
II	22,361	$530,626.53	$455,717.18
III	13,471	$339,873.33	$274,538.98
	TOTAL	$2,148,949.23	$1,957,519.38

The pricing falls within reasonable ranges as determined by preliminary estimates made by staff. There is a significant increase in pricing over the current contract with Halton Recycling Ltd. (dba International Paper Industries), however it is generally understood that the current contract was underbid (in 2003) and contributed to the current contractor struggling to consistently meet the performance requirements of the contract. It is noted that the pricing proposed by the current contractor (Halton Recycling Ltd.) is approximately $1.5 million per year higher than the current contract.

The existing recycling collection contract ends April 30, 2009 for Areas I & III, and July 31, 2009 for Area II; however, the current contractor has been asked to amend the collection end date for Area II by way of a mutual letter agreement. The proposal from Waste Management provides possible collection service commencement dates of May 1, 2009 for all three contract areas. Subject to agreement between the City and the current contractor to amend the collection end date for Area II, staff recommends having Waste Management commence collection services for all three areas on May 1, 2009, primarily to eliminate the staged collection commencement and end dates and simplify the transition for this contract and all future contract changes. The difference between the cost to have Waste Management begin collection in Area II on May 1, 2009, and the cost to continue with the current contractor in Area II through July 31, 2009, is approximately an additional $75,000.

FINANCIAL IMPLICATIONS

The cost of providing recycling collection service to apartments is funded by the Solid Waste Utility (SWU) user fees. The SWU Fees are set annually to recover the annual budgeted cost of providing the recycling program services. A surplus (savings) or deficit (cost overrun) incurred in a given year is normally carried forward. These surpluses or deficits are reduced or eliminated over several years by adjusting the next years' user fees accordingly. The Solid Waste Capital Reserve is used as a solid waste utility rate stabilization fund.

The 2009 SWU user fees were approved by Council on October 30, 2008. The Recycling Program fees for 2009 were set based on the $0.64 million per year cost of the existing contract in Areas I, II & III. The recommended proposal from Waste Management of Canada for Areas I, II & III is estimated to cost $1.96 million per year. The increase of approximately $1.32 million per year itself will result in a recycling user fee increase of about $5 per year per customer starting in 2010.

For 2009, staff estimates that the new contract costs will exceed the budgeted amount by about $0.88 million. This budget variance (along with the anticipated deficit due to a steep drop in recyclable commodity prices) will be addressed in the 2010 SWU User Fee Report that Council will receive at the end of 2009. In keeping with the self-funding principle of the Solid Waste Utility, it is anticipated that staff will recommend that the 2009 deficit be recovered through the annual SWU user fees in the following one to two year period. And in keeping with the policy of funding SWU user fee deficits, the 2009 deficit would be temporarily funded over the same 2010-2011 period from the Solid Waste Capital Reserve. The Reserve is sufficiently large to fund this deficit.

CONCLUSION

The General Manager of Engineering Services recommends acceptance of the response to Expression Of Interest PS08182 offering best value to the City and entering into an agreement with Waste Management of Canada for Collection of Recyclable Materials from Multi-Family Buildings in Areas I, II and III for a period of five (5) years at an estimated annual cost of $1.96 million.

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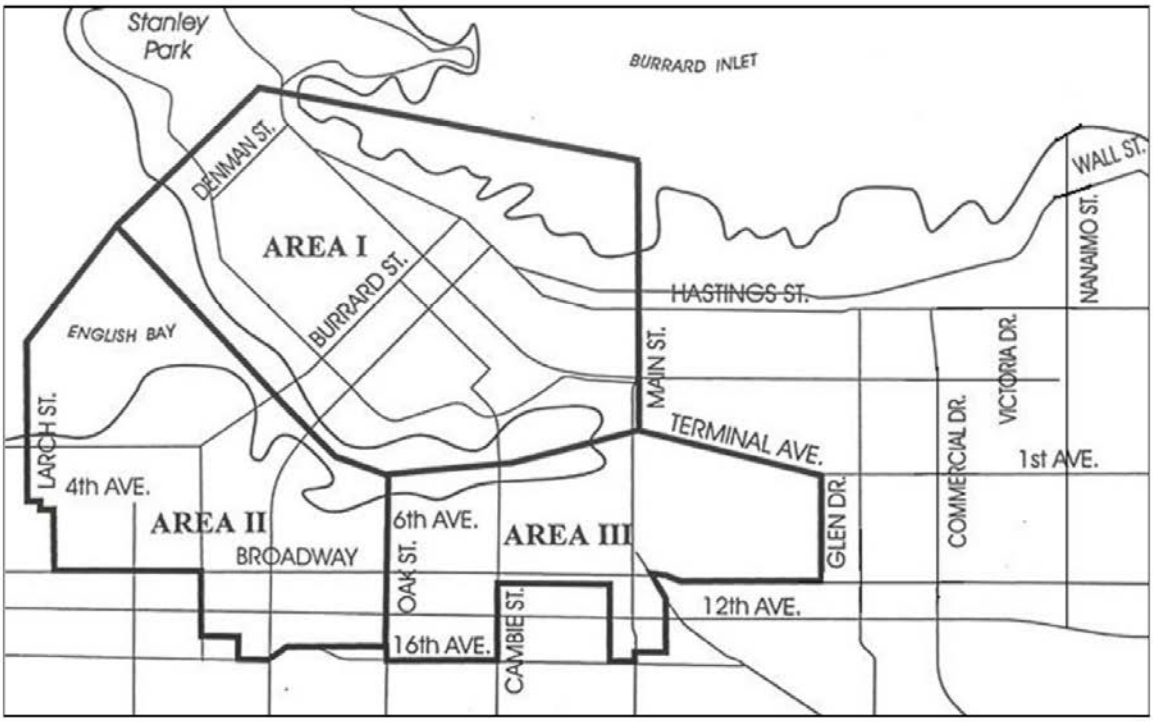
CONTRACTED AREAS FOR APARTMENT RECYCLING PROGRAM



AREA	Description	Number of Suites	Number of Buildings
I	Bounded by Stanley Park, English Bay, False Creek, Terminal Ave., Main St., Burrard Inlet and Coal Harbour	60,219	893
II	Bounded by Larch St., 4th Ave., Balsam St., 5th Ave., Vine St., Broadway, Burrard, 14th Ave., Firs St., 16th Ave., Marpole Ave., 15th Ave., Oak St., False Creek and English Bay	22,361	979
III	Bounded by Oak St., 16th Ave., Cambie St., 10th Ave., Ontario St., 16th Ave., Main St., 15th Ave., Prince Edward St., Kingsway, Broadway, Glen Dr., Terminal Ave. and False Creek	13,471	453

An Assessment of Automated Collection of Commingled Recycling for Vancouver: Summary Report

EXECUTIVE SUMMARY

In 2008 staff completed a comprehensive assessment of costs and performance of various automated recycling collection program models, relative to Vancouver's current system of collecting three streams of materials sorted at curbside.

The project involved two phases. Phase one included a literature and policy review, and interviews with local processors. Twelve residential commingled recycling programs in operation throughout North America were reviewed in detail. Eight of those programs involve single stream collection. Advantages and disadvantages of single and dual-stream systems, compared to Vancouver's current manual three-stream collection programs were identified. (Note: "Single stream" refers to programs that allow all recyclables to be collected commingled in one container. "Dual stream" programs use carts with a center divider ("split carts"), with one side of the cart allocated to all recyclables except glass, and the other side designated for glass, since broken glass contaminates other materials).

Phase two consisted of a cost-benefit analysis of five different bi-weekly automated single/dual-stream collection configurations that could be applied to Vancouver:

i) Fully Automated Single-Stream Recycling including Glass;
ii) Fully Automated Single-Stream Recycling with Glass Collection via Depots;
iii) Fully Automated Dual-Stream Recycling with Split Carts;
iv) Fully Automated Single-Stream Recycling with Monthly Manual Glass Collection;
v) Semi-Automated Single-Stream Recycling with Bi-weekly Manual Glass Collection.

Key findings are summarized as follows:

- There are efficiencies to be gained by using the same vehicles for recycling collection as are currently used for garbage and yard trimmings collection.
- It is expected that by automating the collection of recyclables, worker safety, comfort, job longevity and work diversity opportunities would increase.
- Converting to automated, commingled recycling would allow a switch from weekly to bi-weekly collection of recyclables from single family homes, thereby allowing for the elimination of about 7 to 9 collection positions.
- Collection only costs are normally less with single stream systems, compared to multi-stream sort at curbside programs. However, total net program costs are greater when increased material processing and marketing costs, and reductions in commodity revenues are factored in, since those costs are higher with commingled systems.
- Commingled recycling programs result in an increase in the amount of residual garbage in the recycling stream. This results in collection and processing inefficiencies. The amount of residual found mixed with commingled recyclables is greatest in single-stream programs than dual-stream programs. Programs that include glass as a commingled material experience a greater amount of residual than those that exclude glass.

- Multi-stream sort at curbside programs yield materials that are more valuable, more marketable and more useable by locally based paper processors. Maintaining high quality materials maximizes revenue potential for local governments.
- Challenges with marketing material originating from commingled recycling programs are further exacerbated during times of poor economic conditions.
- Currently, we are aware of two local municipalities that recently began collecting recyclables commingled, and a third municipality is moving in that direction.
- At this time there is only one processing facility in the region designed to process commingled recyclables. This is a new facility and it is too early to indicate if this operation is sustainable. Further, based on information available it does not have the capacity to process the quantity of material originating from a Vancouver catchment.
- We estimate that retooling and expanding other private sector material processing facilities would take a year or more, and that that work would cost several million dollars to accommodate the large volume of commingled recyclables that would be available from Vancouver. A second company that had planned on building a processing facility in the region last year has since terminated those plans.
- Processing complexity and capacity are significant issues that would need to be overcome to enable the start of a large scale commingled recycling program in Vancouver. The greatest challenge with successfully processing commingled recyclables is glass, which when mixed with paper fibre is very undesirable and problematic, and is therefore considered a contaminant by processors and paper mills.
- There is longstanding City policy that stipulates newspaper collected from Vancouver's residential recycling program be directed to a local remanufacturer, subject to a fair market price. This led to the construction of the now Catalyst de-inking plant in Coquitlam, the only locally available facility of its kind. Catalyst has written to the City expressing their opposition to single stream collection programs because of material quality problems.
- Social advantages brought about by automated recycling collection include reduced wind blown litter, the convenience of using a large wheeled cart, and the convenience of not having to sort. Negative social consequences include the potential inconvenience of storing another large cart and negative issues resulting from binning activities (e.g. stolen carts, carts tipped over).
- Positive environmental attributes include the assumed reduced number of recycling trucks operating on a daily basis. Negative attributes include increased recycling material contamination rates, increased reliability on overseas processing markets (and associated impacts from shipping overseas), and increased energy required for downstream processing operations.

The financial analysis concluded that all bi-weekly program options reviewed would result in a decrease in annual operating costs, with the exception of a semi-automated program involving manual collection of glass at the same time the cart is emptied. However, a total net cost increase would result with all scenarios when processing costs and reduced material commodity revenues are factored in. That increase is estimated to range from $0.315 to $2.042 million per year compared to our current program. The projected annual utility fee increase per dwelling unit ranges from $1.30 to $8.20. Program start-up costs (included in the above) are estimated to range from $8.2 to $12.5 million. The majority of this cost would be for the purchase of carts estimated at $6.1 to $10.3 million.

Of the various program configurations considered, two are suggested as potentially having the most merit for future consideration:

Option (a) - Fully Automated Single-Stream Recycling including Glass (total net program cost increase estimated to range from $0.315 to $1.232 million)

Option (d) - Fully Automated Single-Stream Recycling with Monthly Manual Glass Collection (total net program cost increase estimated to range from $0.607 to $1.547 million).

However, as indicated above, it is projected that both options would result in an overall cost increase in the recycling program. It is also concluded that these options are only possible with the development of more sophisticated, larger scale, reliable and cost effective material processing capacity in the region.