



**STAFF REPORT
ACTION REQUIRED
with Confidential Attachment**

**Waste Electrical and Electronic Equipment and
Municipal Hazardous or Special Waste Collection from
Multi-Residential Locations Pilot Results and Program
Roll-Out**

Date:	March 31, 2010
To:	Public Works and Infrastructure Committee
From:	General Manager, Solid Waste Management Services
Wards:	All
Reason for Confidential Information:	This report involves the security of property belonging to the City.
Reference Number:	p:/2010/swms/April/005PW

SUMMARY

The purpose of this report is to provide a summary of the results of the 2009 Municipal Hazardous or Special Waste (MHSW) and Waste Electrical and Electronic Equipment (WEEE) collection pilot in multi-residential locations and to provide information on WEEE program roll-out to all multi-residential locations in Toronto.

RECOMMENDATIONS

The General Manager, Solid Waste Management Services recommends that:

1. City Council authorize the General Manager of Solid Waste Management Services to negotiate and execute an agreement for a formal rate with Miller Waste Systems for the collection of WEEE material from the multi-residential locations that receive front-end collection service on terms and conditions satisfactory to the General Manager, Solid Waste Management Services, and in a form satisfactory to the City Solicitor, provided that the prices shall not exceed the fees identified in Attachment 1 – Confidential Information. The rate will be negotiated in approximately 12 months, at which time sufficient data on actual

volumes collected and resources required will be available to facilitate negotiation of a set per tonne rate for the collection of WEEE;

2. City Council authorize the public release of the confidential information in Attachment 1 once the appropriate agreement resulting from approval of Recommendation 1 is finalized to the satisfaction of the City Solicitor; and
3. City Council direct the 3-1-1 Project Management Office, in consultation with the General Manager, Solid Waste Management Services to expedite the updates to the 3-1-1 system that are necessary to implement the roll-out of a WEEE collection service to multi-residential locations in Toronto.

Financial Impact

A Waste Diversion Ontario industry funded waste diversion program for WEEE is currently in place. Under this program, affected industry stewards are financially and operationally responsible for recycling WEEE and pay a significant portion of the cost to municipalities to collect and transfer the material.

Ontario Electronic Stewardship (OES) is the Industry Funding Organization that oversees the stewardship program for WEEE. Starting April 1, 2009, the City of Toronto, and other Ontario municipalities, began receiving funding from OES for Phase 1 materials, including televisions, computers, monitors and printers. Approximately 80% of WEEE currently collected by the City is covered within Phase 1. Funding for the remaining Phase 2 materials, which includes cell phones, radios, cameras, MP3 players and VCR and DVD players, will begin in April 2010.

Under this stewardship program, the City does not pay for processing costs to manage the materials covered under the program. In addition, the City receives \$165 per tonne for collecting, sorting and preparing the material for transport. OES is increasing this rate to \$185-\$235 per tonne depending on whether the material is collected, or received at depots or Environment Days. It is expected that the rate for WEEE collected from multi-residential locations will be \$230 per tonne.

The current contract with Miller Waste Systems Inc. does not contain a provision for WEEE collection from multi-residential locations. As staff are currently unable to estimate the potential tonnage of WEEE waste available from all multi-residential locations serviced by the City's front-end collection contractor, the current hourly rate for incidental work under contract 47013545 will be used to compensate the contractor for up to a year, at which time sufficient data will be available to facilitate negotiation of a set rate for WEEE material. While the exact collection cost per tonne cannot be determined at this time, it is expected that the City's cost to handle WEEE from multi-residential locations will be significantly higher than the \$230 per tonne OES payment.

However, these costs will be reduced by the savings realized by not collecting WEEE as part of the bulky item collection and can be accommodated within the approved 2010 Solid Waste Management Services Operating Budget.

Future Operating Budget submissions will include costs based on previous year tonnage and set collection rates.

The Deputy City Manager and Chief Financial Officer has reviewed this report and agrees with the financial impact information.

DECISION HISTORY

At its meeting of May 5, 2009, the Public Works and Infrastructure Committee received for information a report (April 20, 2009) from the General Manager, Solid Waste Management Services regarding the Municipal Hazardous or Special Waste (MHSW) and Waste Electrical and Electronic Equipment (WEEE) Collection Pilot in Multi-Unit Buildings.

The staff report and the Public Works and Infrastructure Decision Document can be viewed at:

- Staff Report:
<http://www.toronto.ca/legdocs/mmis/2009/pw/bgrd/backgroundfile-20512.pdf>
- Public Works and Infrastructure Decision Document
<http://www.toronto.ca/legdocs/mmis/2009/pw/decisions/2009-05-05-pw24-dd.htm>

ISSUE BACKGROUND

Traditionally, the solid waste diversion rate for multi-residential locations has been significantly lower than the diversion rate for single residential homes. Diversion programs for all waste streams from multi-residential locations need to be enhanced if the City is to reach its 70% diversion from landfill goal.

COMMENTS

Pilot Methodology

In 2009, Solid Waste Management Services conducted a pilot to examine ways to increase the diversion of MHSW and WEEE from multi-residential locations. Household Hazardous Waste items collected by the “HazMobile” included primarily paint, batteries, fluorescent light bulbs and tubes, chemicals, old medications, cleaning supplies, thermometers, and propane tanks/cylinders. Electronic items collected by the “ElectroVan” included primarily computers, monitors and printers, fax machines, televisions, DVD/VCR players, and cell phones.

Eighteen (18) building locations, representing 70 buildings, were selected to participate in the pilot, including apartments, condominiums, co-operatives and community housing buildings of various sizes. In total, there were 30 condominiums, 35 apartments, 3 Co-operatives and 2 Toronto Community Housing Corporation building locations participating in the pilot. The buildings were selected from across the City in high density neighbourhoods that did not have easy access to the City's Solid Waste Drop-Off Depots. Pilot building locations were represented in each Community Council area.

As part of this pilot, three (3) different collection scenarios were tested, including stand alone buildings, building complexes, and street events that serviced multiple buildings in a small community. Since the street events offered collection to multiple buildings managed by different property managers, these events occurred on City-owned property. The events held at stand alone buildings and building complexes occurred on the building's property, in the waste collection area or the visitor parking lot, and serviced the residents in their respective building(s).

City staff operated each event by receiving and transporting the items for recycling or proper disposal. Two-three events were held at each building location during the pilot, which ran from April 25, 2009 to November 7, 2009. Events were held on Saturdays from 9:00 a.m. – 11:00 a.m. and 1:00 p.m. – 3:00 p.m.

Building residents were notified of the pilot and collection event details through delivery of a door-to-door flyer and posters displayed in building common areas (e.g., recycling room, mailroom, elevator, lobby etc.).

Pilot Costs

Approximately 22 tonnes of WEEE were collected as part of this pilot. For the WEEE portion of the pilot, collection costs were \$26,000 and processing costs were \$3,100 resulting in a gross cost of \$29,100. Industry responsibility and funding offset this amount by \$5,400 resulting in a net cost to the City of \$23,700.

Approximately 10,200 kg of MHSW were collected as part of this pilot. For the MHSW portion of the pilot, collection costs were \$22,000 and processing costs were \$9,000 resulting in a gross cost of \$31,000. Industry responsibility and funding offset this amount by \$4,500 resulting in a net cost to the City of \$26,500.

Table 1: Actual Pilot Costs

	Collection Costs	Processing Costs	Industry Responsibility /Funding	Net Cost to City
WEEE	\$26,000	\$3,100	(\$5,400)	\$23,700
MHSW	\$22,000	\$9,000	(\$4,500)	\$26,500
Total	\$48,000	\$12,100	(\$9,900)	\$50,200

Incentive: Air Miles Reward Miles

As an added incentive, at some buildings, the City offered an AIR MILES Bonus Card worth 10 AIR MILES reward miles to residents that dropped off MHSW or WEEE during their collection event. One bonus card was offered for any quantity of material brought to the event. Approximately 72% of residents accepted the Air Miles Bonus Card.

In order to test the impact of the AIR MILES Bonus Card on participation rates, and for comparison purposes, two building locations were designated as a control group and did not receive the AIR MILES Bonus Card incentive. The participation rate at these locations tended to be low. However, it is difficult to ascertain whether this was due to lack of interest from residents or if it was because an incentive was not offered.

Pilot Diversion Results

Table 2: Pilot Totals

Total Attendance	Number of buildings Serviced	Number of Units Serviced	Air Miles Cards Distributed	WEEE Collected in Kg	MHSW Collected in Kg
1671	70	12,880	1182	21,955	10,241

Pilot Findings and Conclusions

An overwhelming benefit of the pilot was that residents did not have to travel far to recycle or properly dispose of their unwanted hazardous and electronic materials. Many participants expressed that they had no means to transport their materials to a Drop-off Depot or a Community Environment Day. In essence, the pilot removed the inconvenience factor that may have posed an obstacle to multi-unit residents properly diverting this material from landfill.

Events held at building complexes and street events provided a better opportunity to service more residents within the 2-hour event timeframe, which was a better use of staff time and resources. While not the case at all building locations, these events were generally busier than the events held at stand alone buildings.

The first collection events scheduled in the spring of 2009 tended to be the busiest events. This could be attributed to “spring cleaning” practices or the fact that residents used this opportunity to remove stockpiled materials from their home. Having the events scheduled at this time of year might have encouraged residents to divert this material through these collection events as opposed to disposing of them in the waste stream. Residents and building management were very pleased with the events and the convenience of collection. Many wanted the events to continue on a regular basis beyond the pilot.

A physical barrier to successfully rolling out this type of system citywide is that not all buildings have enough available space on their property to accommodate our collection vehicles and required material receiving area. If sufficient space (14 visitor parking spaces or an area of approximately 125' x 15') is not feasible, under the pilot structure, an event could not occur at that building. This is particularly a challenge for older buildings that have limited, if any, visitor parking spaces and a small waste collection area that is occupied with garbage and/or recycling bins.

If a building does have sufficient space to accommodate our collection vehicles, building management must keep the area clear prior to staff's arrival. If the area is not kept clear prior to staff's arrival, and there is nowhere else to park the vehicles, the event might have to be cancelled.

In order for residents to participate in the pilot, they had to be home during collection hours. Some building management staff offered to collect materials from residents ahead of time and dropped them off during event hours on their behalf. However, this was not a service requested by City staff or offered at many buildings.

The attendance and quantity of materials collected at each pilot event was not consistent and varied significantly. Some events were very well attended, while others were not. A program launch to all multi-residential locations, using the same collection strategy employed during the pilot, could be cost prohibitive and an inefficient use of staff time and resources for events that are not well attended.

Program Roll-out

Based on the pilot results and analysis, we will continue our MHSW Toxics-Taxi service which includes multi-residential locations and will roll-out a WEEE collection program to all large multi-residential locations receiving front-end collection from the City using an appointment-based collection method, done on a request basis. An appointment-based collection method will be more efficient and cost effective than the event-type system tested in the pilot and reduces the possibility of visiting buildings with minimal interest, materials and participation.

The City's front-end collection contractor will pick-up materials directly from building management at a designated date and time, during regular business hours. Appointments will be arranged by building managers or superintendents contacting the City through 3-1-1 when a minimum quantity (approximately 20 items) of materials is ready for pick-up. Building management will collect and store materials on behalf of residents until a collection appointment is arranged. The City will offer bins, similar in size to Blue Boxes, to building managers to store the smaller WEEE items such as cell phones and MP3 players. Smaller buildings that receive in-house curbside collection will be able to set out their WEEE for recycling with other bulky items on their regular garbage collection day, similar to single-residential homes.

Presently, 3-1-1 does not include the functionality required to book WEEE appointments from multi-residential locations. This functionality must be in place prior to the start of the collection program. Solid Waste Management Services will work with the 3-1-1 Project Management Office to ensure the system is updated to accommodate the start up of the WEEE collection service.

The current contract with Miller Waste Systems Inc. does not contain a provision for WEEE collection from multi-residential locations. As staff are currently unable to estimate the potential tonnage of WEEE waste available from all multi-residential locations serviced by the City's front-end collection contractor, the current hourly rate for incidental work under contract 47013545 will be used to compensate the contractor for up to a year, at which time sufficient data will be available to facilitate negotiation of a set rate for WEEE material. Pricing will not exceed the amounts outlined in Attachment 1 - Confidential Information.

A multi-residential focused communications campaign will be undertaken to promote the details of the new collection system. The campaign will highlight the types of materials available for collection, how to book a collection appointment and that the service is free. Since property managers and superintendents will organize the collection of materials from residents within their building, they will be the target of the communications campaign. The City will produce generic posters that property managers and superintendents could download and print for free from the City's website.

The posters will alert residents of the types of materials collected by the City and space will be available for building staff to indicate where materials are to be collected in their building.

CONTACT

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SIGNATURE

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ATTACHMENT

Attachment 1 - Confidential Information