

TO: Mayor Kelly and Members of Halifax Regional Council



SUBMITTED BY: _____
Mike Labrecque P.Eng, Director, Transportation and Public Works

DATE: March 10, 2009

SUBJECT: **Resident Accessibility to Electronic Waste and
Household Hazardous Waste Recycling Programs**

INFORMATION REPORT

ORIGIN

Request for an Information Report at the January 20, 2009 Regional Council meeting.

January 27, 2009 Information Report provided to Regional Council on February 10, 2009.

BACKGROUND

At the January 20, 2009 meeting of Regional Council, the following motion was approved:

“Moved by Councillor Watts, seconded by Councillor Sloane, that Halifax Regional Council request a staff report on the feasibility of implementing a program in HRM, similar to Sudbury’s Toxic Taxi Program, for hazardous waste and electronic waste recycling. The report is to consider costs, models from other municipalities, and a recommendation in regard to possible working partnerships with other municipalities, and a recommendation in regard to possible working partnerships with other organizations and HRM resources. “MOTION PUT AND PASSED.”

Further to the attached staff report of January 27, 2009 (Attachment #1), staff has assembled the necessary information enabling a response to the motion approved at the January 20, 2009 meeting of Regional Council.

DISCUSSION

For the information of members of Regional Council, a brief descriptive of the HRM Household Hazardous Waste and the industry lead Electronic (E) Waste recovery/recycling programs is provided. This information, which includes usage, participation, satisfaction rate and cost, is provided as a comparative to the HRM providing a HHW/E-waste collection program.

General Comment:

The public drop-off service model for the recovery/reuse of a variety of materials is a common business practise in Nova Scotia, Canada, and other countries. The majority of public drop-off programs are provided by industry. Although it is common for a municipality to provide a hazardous waste program for residential material, it is becoming more frequent for various items, including paint, used oil and batteries, to be recovered through an industry lead program.

In Nova Scotia, for more than five years, many industries have provided the following drop-off programs through the noted means:

- | | |
|--------------------------------|---|
| ▶ Deposit containers | } RRFB Enviro Depots
} Retail outlet
} Retail outlet
} Pharmacies
} Retail outlet |
| ▶ Latex and oil base paint | |
| ▶ Used oil | |
| ▶ Tires (auto/truck up to 20") | |
| ▶ Residential needles/sharps | |
| ▶ Rechargeable batteries | |

In 2008, the electronics industry commenced an Electronic (E) waste depot program. Thirty-five E-waste depots are operated by Atlantic Canada Electronics Stewardship/RRFB.

- ▶ Electronic (E) Waste - 7 depots in HRM

Historically, municipalities have been burdened with the management and costs when goods/products have reached their end-of-life. The assignment of responsibility and costs for the management of “consumed” goods and products to each respective industry sector, is referred to as an Extended Producer Responsibility (EPR) program.

The Canadian Council of Ministers of Environment (CCME) have endorsed an EPR Action Plan, the goal of which is for industry to be responsible for their products at end-of-life. Attachment #2 is an article from the Solid Waste and Recycling journal “Canada Wide EPR Action Plan”.

1.0 HRM Household Hazardous Waste (HHW) Depot and Mobile Depot (four events) Program:

1.1 *Service Level:*

The HRM HHW Depot Program commenced operation in June 1996 with the opening of the HHW Depot at #20 Horseshoe Lake Drive (formerly 50 Chain Lake Drive), Bayers Lake Business Park.

Pursuant to funds approved by Regional Council in the 2008/09 Operating Budget, the HHW depot is operational forty-five (45) Saturdays annually. The HHW depot is not open on Saturdays which fall on a long weekend as it was determined, based upon the low usage in previous years, not to be cost effective. Approximately 163 cars visit the HHW depot every Saturday.

In addition to the forty-five (45) Saturdays, four (4) Mobile HHW Events are provided annually, typically one event in the spring in Dartmouth and three in the fall, of which two are in rural HRM (i.e. Eastern Shore, Fall River/Waverley, or St. Margarets Bay). The other fall event is also on the east side of Halifax Harbour in either Dartmouth, Westphal or Eastern Passage.

The management of hazardous waste is governed by both Provincial and Federal regulations, respecting the receipt, assaying/identification of the product(s), segregation, bulking, packaging, manifesting, transporting, and destination, i.e. reuse/recycling of oils, paints, batteries, propane tanks or disposal of flammables, pesticides, pharmaceuticals, corrosives, acids, etc.

1.2 *Cost:*

FY 2008/09 Operating Budget Account number R334, HHW, is in the amount of \$401,301. Projected expenditure for FY 2008/09 is \$376,301.

As approved by Regional Council in the spring of 2007, RFP No. 06-393 - Operations of Household Hazardous Waste Services - was awarded to Atlantic Industrial Services (AIS). The contract commenced in May 2007, and continues until April 30, 2011, with a potential one year extension if agreed by both parties.

Of the \$401,301, approximately \$40,000 (10%) is AIS administrative and personnel costs for the operation of the HHW depot and the four mobile events' sites for a site manager, chemist, technicians, labourers, drivers, etc. The remaining budget expense is for the management and disposition of the materials in accordance with NS Environment operating permit approval requirements (which include surface and ground water monitoring at the HHW depot), and also Federal Transportation of Dangerous Goods regulations respecting the transport of hazardous waste from the HHW depot.

Of the approximate five thousand (300 litre lab packs/ 205 litre bulk drums and other unit measures) hazardous materials received and packaged in FY 2006/07, the major items were:

Materials (2006/07)	% of HHW	\$
Large and Small Propane Tanks	34%	\$20,000
Flammables	20%	\$110,000
Acid Batteries	19%	\$4,000
Used Motor Oil	5%	\$16,000
Latex Paint	4%	\$6,000
numerous other categories, e.g. Oxidizers, Hydroxides, Pesticides, Aerosols, Ni Cad Batteries, Alkyd Paint, Acids and Glycol, etc. Hydroxides, Pesticides, Aerosols, Ni Cad Batteries, Alkyd Paint, Acids and Glycol, etc.	18%	\$204,000

Notes:

1. *HRM has extensively promoted in the Naturally Green Newsletters, the HRM website, through the 490-4000 Corporate Call Centre, and the Solid Waste Resources education material for the past five years, that latex and oil base paints are accepted at the RRFB Enviro Depots. Although residents continue to drop off latex (and oil base) paint at the HHW depot and Mobile events, the volume and cost has been reduced by approximately \$15,000/yr.*
2. *HRM, in partnership with the Regional Chairs Solid Waste Resources Committee, has corresponded to the Province (Premier and Minister of Environment) that non voluntary extended producer responsibility (EPR) stewardship agreements are required with all industry sectors, i.e. paint, propane, pesticides, etc., which when enacted, industry bears responsibility for the management of each product, not municipalities.*

1.3 Usage/Participation/Customer Satisfaction:

In 2008, a total of 7,317 customers (i.e. private vehicles) utilized the HHW depot in Bayers Lake. An additional 1,106 vehicles utilized the four Mobile HHW events, for a total of 8,333 vehicles. As identified by residents visiting the HHW Depot and Mobile events, it is not uncommon for a resident to include household hazardous waste from friends and relatives along with their material. If a factor of 15% representing the number of cars with material from other properties is applied, the total number of residential properties serviced in 2008 was

approximately 9,500, or 5.5% of all households in HRM. In 2008, the HRM HHW Depot and Mobile Events program averaged a cost of \$42 per household serviced.

Attachment #3 details the number of vehicles that were serviced at the HHW depot and the four Mobile HHW events in 2008. Of the 7,317 cars that visited the HHW depot in 2008, approximately:

- ▶ 3,073 (42%) were from the former City of Halifax area;
- ▶ 1,682 (23%) were from the western HRM;
- ▶ 1,243 (17%) were from Bedford/Sackville;
- ▶ 1,097 (15%) were from Dartmouth; and
- ▶ 219 (3%) were from Eastern Shore.

Of the 1,106 cars that were serviced at the four Mobile HHW events, the majority were from the immediate communities of Dartmouth/Eastern Passage, Fall River/Waverley/Beaverbank and Musquodoboit Harbour/Eastern Shore.

In October 2008, Corporate Research Associates was engaged to survey (Attachment #4) the level of satisfaction/or dissatisfaction with HRM Solid Waste Resources services, including the HHW Program. The results of the fall 2008 survey (the same questions were asked previously, in 2001 and 2005) revealed that 68% of HRM residents are satisfied with the HHW program, an increase from 58% in 2005. The increase to 68% is likely attributable to the addition of two annual Mobile HHW events in Dartmouth, Eastern Passage or Westphal, which commenced in FY 2006/07.

2.0 Industry - NS Environment Approved - Electronic (E) Waste Programs:

As the January 27, 2009 staff report advised members of Regional Council, in 2007 the Province (Minister of Environment) approved a management plan submitted by Atlantic Canada Electronic Stewardship (ACES) for the recovery/recycling of old end-of-life electronics. The program consists of 35 depots located across Nova Scotia. Seven (7) E-waste depots are located in the HRM where residents can drop off old electronics. Effective February 1, 2009, designated electronic waste (see list attached, attachment #5) is accepted at the depots. Also, effective the same date, all electronic waste (excluding photocopiers) is banned from disposal in a landfill. The RRFB has been engaged by ACES to administer the program. The program is funded through a fee collected by the industry at the point-of-sale of new electronic products.

The ACES/RRFB program is fairly new and recently expanded. In February 2008, when phase one of the program was rolled out, ACES/RRFB chose a “soft launch delivery” as

the E-waste recycling/disassembly centre had not been established in Nova Scotia. With the regional E-waste recovery/disassembly centre in Elmsdale now operational, ACES/RRFB plans a supportive communications and public education campaign to raise the awareness of their E-waste recovery program in 2009.

The location of the seven (7) E-Waste drop-off operations in HRM (same location as Enviro Depots) are:

- ▶ The Bin Doctor, 2651 Clifton Street
- ▶ Tanner's Transfer, 3791 MacKintosh St.
- ▶ Bluenose Bottle Exchange Ltd., 99 Woodlawn Rd.
- ▶ Burnside Recycling, 66 Simmonds Dr.
- ▶ Fader's Bottle Exchange Ltd., 15 Sackville Cross Rd.
- ▶ Friends Depot, 8134 St. Margaret's Bay Rd.
- ▶ The Recycle Market, 11470 #7 Highway

On January 20, 2009, the Canadian Wireless Telecommunications Association (CWTA) initiated a drop-off (take-back) program, where old cell phones and related accessories (e.g. chargers, batteries, etc.) are accepted at all major retailers across Canada. This new industry lead program, as also approved by the Minister of Environment, supplements the ACES/RRFB program.

2.1 *Recovery of Electronic Waste:*

From information provided by the RRFB in 2008, a total of 2,341 tonnes of E-waste was recovered in Nova Scotia, of which 1,090 tonnes (47%) was recovered in the HRM. This recovery equates to 2.8 kg per person in HRM and 2.2 kg/person in the remainder of Nova Scotia.

The 2008 ACES/RRFB E-Waste eleven month program included old televisions, printers and computers. With the addition of other E-waste (effective Phase II, February 1, 2009) and a promotional campaign by ACES/RRFB, the recovery rate is expected to increase in FY 2009/10 and future years, as more people become familiar with the program. Attachment #5 depicts E-waste recovered through the ACES/RRFB eleven month program in 2008.

The recovery of old cell phones through the CWTA program at all major retail outlets is also anticipated to increase, as the public becomes aware of this new industry lead program.

3.0 *Municipal Hazardous Waste Collection Programs:*

The majority of municipal HHW programs in Canada are drop-off programs, where residents drop off HHW at either a permanent HHW, a special one-day event at a

municipal property, or at a major retail centre (i.e. mall). Staff have located three municipalities that provide the collection of either HHW or E-waste. A brief descriptive of each program is provided:

3.1 City of Greater Sudbury:

(2006 Stats Canada - Population 157,857, Households 64,490, Size 3,627 km²)

3.1.1 HHW Collection Program:

- ▶ Residents call to request pick up and must be home at time of collection;
- ▶ 2,458 service requests in 2008;
- ▶ 5 day service request standard;
- ▶ Service provided Monday to Friday between 8:00 a.m. and 8:00 p.m.;
- ▶ 2,458 service requests is 3.6% of all households in Sudbury;
- ▶ 86 tonnes of HHW reported collected; and
- ▶ Cost of collection service is \$25,000 annually (approximately \$10 per service request).

3.1.2 Sudbury's HHW Depot Drop-Off Program:

- ▶ In 2008, 5,011 vehicles utilized the drop-off program;
- ▶ 175 tonnes received.

***Note:** 70% net increase in Sudbury HHW Program - almost exclusively related to the commencement of an HHW Collection Program in 1998. 32% of total service requests are for the HHW collection program. Total service requests (depot and collection) is 7,469 = 11% HH.*

3.2 Toronto - HHW Collection and Management (Disposal) Service:

(2006 Stats Canada - Population 2,500,000, Households 1,000,000, Size 630km²)

- ▶ Residents call to request pick up and must be home at time of collection;
- ▶ Approximately 3,000 requests completed annually;
- ▶ Minimum quantity of 10 litres, maximum quantity of 50 litres;
- ▶ Service provided Monday to Friday;
- ▶ 3,000 service requests is .3% of all households in Toronto; and
- ▶ 80 tonnes of HHW reported collected.

Cost of service is:

- \$100,000 staff;
- \$85,000 disposal;
- \$6,000 fuel and safety equipment;
- \$100,000 collection vehicle (\$12,500/year over eight years);
- approximately \$68 per service request (collection and management).

3.3 East Hants - E-Waste (Collection Only):

(2006 Stats Canada - Population 21,387, Households 8,753, Size 1,788 km²)

- ▶ Alternate week, side of road collection of E-waste;
- ▶ One large item, i.e. TV, computer, per household bi-weekly;
- ▶ Cost \$56,160/year;
- ▶ Recovery - 11 tonnes (9 months) = .66kg/person; and
- ▶ Collection of E-waste provided at same time as separate collection of metal goods, i.e. appliances.

4.0 Estimated Cost Components of HRM Collection Service - HHW and E-Waste:
(Collection and Disposal of HHW: No disposal cost for E-waste)

As noted previously, the current contract HRM has with Atlantic Industrial Services does not provide for processing of curbside collection of HHW and E-waste. Staff contacted AIS to obtain potential pricing for adding these services.

Atlantic Industrial Services has provided the following information respecting the provision of a curbside HHW/E-Waste service:

		HHW	E-waste
Collection:	Transportation	\$0.75/km	\$0.75/km
	Labour	\$45/hr	\$45/hr
Disposal:	Household	\$50 for up to 20kg	\$0.0 drop off at E-waste Depot
	Tonnage	greater than 20kg @ \$2.50/kg	N/A

4.1 Estimated cost of HHW and E-Waste Collection Service - Labour:

Based upon the costing information provided by AIS and the participation rate in Sudbury (i.e. 3.6%):

- ▶ the projected number of households in Halifax requesting pick up of HHW a year would be approximately 6,192 HH;
- ▶ plus a multiplier of 33% for E-waste collection = 2,043 HH/yr;
- ▶ results in a projected 8,235 service requests/year;
- ▶ 8,235 service requests/year = 31 service requests/day, therefore estimate 1.5 vehicle and driver required;
 - 260 collection days/yr x 8 hrs x \$45/hr x 1.5, Labour =
\$140,400/yr

Breakdown Total Collection Labour Cost: E-waste = \$46,332
HHW = \$94,068

4.2 Transportation of HHW & E-Waste (8,235 service requests/yr):

It is expected that the majority of service requests will originate from the urban/suburban area of HRM. Utilizing a ratio of 65% urban/suburban and 35% rural, the following costs can be expected:

▶	Service requests 8,235/yr;	
▶	65% urban/suburban = 5,353 x 40km x \$.75/km	= \$160,583
▶	35% rural = 2,882 x 120km x \$.75/km	= <u>\$259,380</u>
▶	for a total transportation cost of	\$419,963/yr

Breakdown Total Transportation Cost: E-Waste = \$138,587
HHW = \$281,372

4.3 Disposal of HHW (6,192 service requests/yr) (no disposal cost for E-waste):

It is expected that approximately 70% of service requests for HHW collection will be less than 20kg. The remaining 30% will have between 20kg and 30kg of HHW. Therefore:

▶	6,192 service requests x \$50 each	= \$309,600
▶	30% = 1,858 x 10kg x \$2.50/kg	= <u>\$ 46,450</u>
▶	for a total disposal cost of	\$356,050

Total Estimated Cost for HHW & E-Waste Annually:

- **Total HHW Labour, Transportation & Disposal Cost = \$731,490**
\$731,490 ÷ 6,192 = \$118/service request

- **Total E-Waste (no disposal cost):** Transportation = \$138,587
Labour = \$ 46,332
\$184,919
\$184,919 ÷ 2,043 request = \$90/service request

Total combined cost: = \$916,409

\$916,409 ÷ 8,235 service request/year = \$111/service request

\$118/service request for HHW and \$90/service request for E-waste, compares to \$42 per household for the HRM HHW Depot and Mobile events (4) service. The higher cost of a HHW collection program reflects a much higher service level standard, i.e. direct collection from households.

In July 2007, Niagara Region, after reviewing the cost of the HHW collection program in Toronto, concluded that a similar service in their Region was cost prohibitive. Niagara Region provides an HHW Depot and Mobile Depot event services similar to HRM's.

5.0 Potential Partnerships:

The provision of a HHW Collection Program would be a major new expenditure for HRM. The provision of the service should only be considered subject to ongoing financial support from other agencies or industry. Potential funding sources include the Resource Recovery Fund and the producers of the hazardous waste. Support from industry is dependent upon the Provincial government enacting legislation making industry responsible for the management of their respective products at end-of-life, i.e. Extended Producer Responsibility (EPR) programs.

It is not anticipated that industry, the RRFB or the Provincial government will provide financial support for the cost of E-waste collection, as the ACES/RRFB drop-off depot system has been operating for little more than a year.

Annually, the RRFB provides an opportunity for municipalities embarking on a new waste diversion service, to fund (50% cost sharing) initial capital and operating costs. Financial support from the RRFB is not provided should the service continue in future years.

There is an opportunity for the HRM (and other municipalities) to communicate to the Province that, based upon the level of public satisfaction (to be confirmed through the Metro Quarterly Survey), a more customer user-friendly program is required for E-waste, which could include take-back to all retail outlets similar to tires and cell phones, rather than continuing with the seven E-waste depots in HRM.

6.0 Current HRM HHW Program Service:

The present HRM HHW Depot and Mobile events (4 annually) service is a well established program with a public satisfaction rate of 68%.

In the interest of better serving the residents of HRM, staff will gather additional information regarding the awareness and satisfaction of the ACES/RRFB and CWTA E-waste programs, and costing information respecting the HRM providing an HHW/E-Waste Collection Service commencing the next RFP Contract for HHW Services in FY 2010/11. This will be accomplished by:

- a) including questions in the next Metro Quarterly Survey measuring the awareness and satisfaction of the ACES/RRFB and CWTA Electronic Waste Recycling Program, and informing the Province of the results;
- b) including in the RFP to be issued in the fall 2010 Household Hazardous Waste (HHW) Program Services, Scope-of-Work - Collection Program as an option; and

completing an application to the RRFB for 50% funding of a 6-month HHW/E-Waste collection; and

- c) informing Regional Council of the results of the application to the RRFB for cost sharing, and the outcome of Scope-of-Work - HHW Collection Program (including costs), in the proposed FY 2011/12 Budget & Business Plan.

In recognition of the expected financial pressures in FY 2009/10 and 2010/11, and the effort by the CCME to shift the responsibility and cost of the management of end-of-life household hazardous waste and electronic waste to industry, HRM's commitment at this time, respecting an HRM HHW/E-waste Collection Program, should be limited to gathering information respecting cost and external funding opportunities and reporting to Regional Council in the proposed FY 2011/12 Budget & Business Plan.

7.0 Potential Options:

Although there are several potential options, due to current and expected future financial pressures in FY 2009/10 and FY 2010/11, it is premature for the HRM to pursue any of the options at this time. The options include:

- a) Increasing the proposed FY 2009/10 Operating Budget R334, HHW, by \$916,413 for the provision of a HHW/E-Waste collection service. Utilizing the Metro Quarterly survey to measure the awareness and public satisfaction of the ACES/RRFB and CWTA E-Waste program, will provide an opportunity to inform the Province and for the HRM to assess the recommended approach in future years.
- b) Submitting an application to the RRFB Municipal Approved Program Fund for 50% funding of a HHW/E-Waste collection program and proceed with a six-month Pilot Program in FY 2009/10. It is premature to pursue this option without first securing a price through the competitive bidding process of the RFP for HHW service (Scope-of-Work, HHW Depot and Collection Service), with the options and cost implications to be included in the FY 2011/12 Budget & Business Planning approval process.
- c) Enhancing the current HHW Program by providing a Mobile HHW Event in peninsula Halifax in FY 2009/10, at an estimated cost not exceeding \$20,000. Current and expected future financial pressures in FY 2009/10 and 2010/11 precludes the enhancement of the HHW program at this time.

BUDGET IMPLICATIONS

The inclusion of questions in the next Metro Quarterly Survey will incur an expenditure of approximately \$2,000. Funding is included in the proposed 2009/10 Solid Waste Resources R333 (Communication & Education) account.

FINANCIAL MANAGEMENT POLICIES / BUSINESS PLAN

This report complies with the Municipality's Multi-Year Financial Strategy, the approved Operating, Capital and Reserve budgets, policies and procedures regarding withdrawals from the utilization of Capital and Operating reserves, as well as any relevant legislation.

ATTACHMENTS

1. Staff report dated January 27, 2009;
2. Solid Waste & Recycling 2/23/2009 article "Canada Wide EPR Action Plan";
3. Vehicles serviced at HHW Depot and 4 Mobile HHW Events in 2008;
4. October 2008 Metro Quarterly Survey;
5. E-Waste - Where Can I Recycle These Electronics - ACES; and
6. Volumes collected (ACES/RRFB eleven month 2008) at E-Waste Drop-off program.


A copy of this report can be obtained online at <http://www.halifax.ca/council/agendasc/cagenda.html> then choose the appropriate meeting date, or by contacting the Office of the Municipal Clerk at 490-4210, or Fax 490-4208.



Report Prepared by:

Jim Bauld, Manager, Solid Waste Resources 490-6606

Financial Approval by:



Catherine Sanderson, Senior Manager, Financial Services, 490-1562



PO Box 1749
Halifax, Nova Scotia
B3J 3A5 Canada

Item No. 3

**Halifax Regional Council
February 10, 2009**

TO: Mayor Kelly and Members of Halifax Regional Council

SUBMITTED BY:

A handwritten signature in black ink, appearing to read "Mike Labrecque".

Mike Labrecque, Director, Transportation & Public Works

DATE: January 27, 2009

SUBJECT: Resident Accessibility to Electronic Waste and
Hazardous Waste Recycling Programs

INFORMATION REPORT

ORIGIN

Request for Information at the January 20, 2009 Regional Council meeting.

BACKGROUND/DISCUSSION

Staff has commenced gathering information which will enable the provision of a comprehensive report respecting the costs and benefits of HRM providing a "Toxic Taxi" service for the collection of household hazardous waste and electronic waste.

Household Hazardous Waste:

Staffs' investigation will determine the approvals required by Nova Scotia Environment (NSE) and the Federal Government, including pertaining to the Transportation of Dangerous Goods Act. Once staff has gathered the information, discussion with Atlantic Industrial Services (AIS), the operator of the HRM Household Hazardous Waste depot located at 20 Horseshoe Lake Drive, will be held to assess how this new service could be best incorporated into the existing RFP 06-393 contract, as a component of the HRM Household Hazardous Waste program.

The Scope of Work for the Operations of the HRM HHW contract, awarded to AIS in the spring of 2007, does not include a "Toxic Taxi" service. Once the information is gathered, staff will forecast the estimated usage (i.e. participation rate) and cost of the service. This information will be measured with the current HRM HHW program which consists of forty- four Saturday operations of the HHW depot facility located in the Bayers Lake business park, plus four special mobile HHW depot events annually (two of which are held in rural communities of HRM, and two in Dartmouth).

Complete information will be provided to members of Regional Council in conjunction with the Proposed 2009-10 Business Plan and Budget.

Electronic Waste:

With respect to electronic waste, many electronic items are regulated and have been banned from disposal in a landfill by the Province. In 2007, the NSE approved a plan whereby the electronic industry recovers electronic waste. This program has been operating since February 2008. Fees, which are collected by the industry at the point of sale, fund the program.

As approved by NSE, Atlantic Canada Electronic Stewardship (ACES) has established recycling drop off centres throughout the HRM, and all of Nova Scotia. The Resource Recovery Fund Board has been contracted by ACES to oversee the operation of the electronic waste drop off centres, and the private sector regional recovery/disassembly facility.

The program, which commenced in February 2008 for televisions, computers and printers, will be expanded to all electronic waste (excluding photocopiers) in February 2009. In addition, effective January 20, 2009, the Canadian Wireless Telecommunications Association launched a recovery/take back program of cell phones at many retail outlets.

Information respecting the RRFB/ACES and the CWTA program is available at www.ACESstewardship.ca and www.RecycleMyCell.ca respectively.

The staff report will also assess the collection of electronic waste as a component of the potentially new "Toxic Taxi" program.

BUDGET IMPLICATIONS

There are no budget implications at this time

FINANCIAL MANAGEMENT POLICIES / BUSINESS PLAN


This report complies with the Municipality's Multi-Year Financial Strategy, the approved Operating, Capital and Reserve budgets, policies and procedures regarding withdrawals from the utilization of Capital and Operating reserves, as well as any relevant legislation.

ATTACHMENTS

A question and answer brochure issued by ACES "Where can I recycle these electronic?"

A copy of this report can be obtained online at <http://www.halifax.ca/council/agendasc/cagenda.html> then choose the appropriate meeting date, or by contacting the Office of the Municipal Clerk at 490-4210, or Fax 490-4208.

Report Prepared by :



Jim Bauld, Manager, Solid Waste Resources 490-6606

Q: How are electronics recycled?

A: Recycling electronics involves processing the materials and recovering metals, glass and plastics that can be recycled into new products.

Q: Where will my electronics go?

A: The electronics will be transported to approved processing and recycling facilities. Recyclers are required to meet Electronics Product Stewardship Canada's (EPSC) Electronics Recycling Standard (www.epsc.ca/recycle). This standard outlines the requirements for environmentally sound recycling in accordance with appropriate health, safety and export provisions.

Q: Who is managing the electronics recycling program?

A: Atlantic Canada Electronics Stewardship (ACES), an industry-led not-for-profit association, is responsible for the program in Nova Scotia. ACES was established by Electronics Product Stewardship Canada (EPSC) and the Retail Council of Canada (RCC) to implement an Electronics Stewardship Program which has been approved by the Province of Nova Scotia. ACES is committed to ensuring that electronic waste is recycled in an environmentally responsible manner.

Q: If I return my unwanted computer, how do I know my personal information will not be seen or stolen?

A: Once an electronic item is dropped off at an ACES Drop-off Centre, it will be sent to an approved recycler for processing and material recovery. However, for your own personal security, you should take steps to make sure that private data is removed from your computer. ACES does not accept liability for data or any other digital content left on electronics dropped-off for processing.

Q: Why is this program important?

A: The ACES Program ensures that electronics are managed and recycled in a safe and environmentally sound manner. This program prohibits the use of prison labour and the export of scrap electronics and hazardous materials to developing nations.

Q: Isn't it important to reuse electronics before recycling?

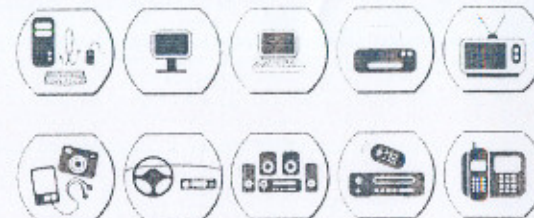
A: Absolutely. The ACES Program is designed to manage unwanted electronic products that have no reuse potential. If your electronic items are not at the end of their useful life, you are encouraged to donate them to family members, friends or local charities.

Q: What if I have a large volume of unwanted electronics?

A: All ACES Drop-off Centres accept large volumes (25 pieces or more) of unwanted electronic material FREE OF CHARGE. Please contact ACES at info@ACESstewardship.ca or 1-877-774-3260 to find an ACES Drop-off Centre near you and schedule a delivery.

Q: Can I return my cell phone?

A: No, cell phone recycling will be managed separately by the Canadian Wireless Telecommunications Association (CWTA). For your nearest location visit www.recyclemycell.ca or phone 1-888-797-1740.



www.ACESstewardship.ca
1-877-774-3260



You've got the power. Recycle it.

Q: What is the Atlantic Canada Electronics Stewardship (ACES) Program?

A: The Atlantic Canada Electronics Stewardship (ACES) Program is a not-for-profit, industry-led electronics recycling program approved by the Province of Nova Scotia and available to all consumers and businesses within Nova Scotia.

Q: How is the ACES Program funded?

A: The program utilizes an environmental handling fee (EHF), paid at the point of purchase, on regulated electronics products. These fees provide stable financing for the collection, transportation and responsible recycling of electronics in Nova Scotia. In addition, funds are used for overall program management and public education.

Q: Why do I have to pay a fee on the purchase of new electronics?

A: Under Nova Scotia Environment's legislation, certain regulated electronic products are banned from disposal in the province's landfills. These fees ensure that unwanted electronics are recycled responsibly through the ACES Program.

Q: Do I have to pay to drop off my unwanted electronics?

A: No, unwanted electronic products can be dropped off FREE OF CHARGE at any ACES Drop-off Centre.

Q: Is the EHF a tax?

A: No, the fees Nova Scotians pay when they purchase regulated electronic products are used solely to fund the electronics recycling program and are not remitted to government.

Q: What regulated electronic items are included in the ACES Program and how much are the Environmental Handling Fees (EHF)?

A: Since February 1, 2008, the following electronic products have been regulated in Nova Scotia and are subject to an EHF at the point of purchase:



DESKTOP COMPUTERS \$10 EHF

Includes Central Processing Units (CPUs), mice, keyboards, cables and other components within the computer. This includes desktop computers, desktop computers acting as servers, and all associated keyboards and cabling.



MONITORS \$12 EHF

A display device used for displaying images from computers or other sources that does not meet the definition of a television. This includes traditional Cathode Ray Tube (CRT) and all flat panel display technologies such as LCD and plasma.



NOTEBOOK COMPUTERS \$5 EHF

Includes portable computers such as notebook, laptop, netbook and tablet personal computers.



DESKTOP PRINTERS \$8 EHF

This includes printing devices that are designed to reside on a work surface, and includes various printing technologies, including laser & LED (electrophotographic), ink jet, dot matrix, thermal, dye sublimation and "multi-function" devices that may copy, scan, fax, or print. Standalone desktop scanners and fax machines are also included in this category.



TELEVISIONS \$15 - \$45 EHF

A video display device with an imbedded television tuner. This includes various display technologies, such as traditional Cathode Ray Tube (CRT), flat panel (LCD and plasma) or rear projection.

18" or less	\$15
19" to 29"	\$25
30" to 45"	\$30
46" and up	\$45



PERSONAL OR PORTABLE AUDIO/VIDEO SYSTEMS \$0.40 EHF

Includes portable devices primarily for personal use including docking speakers; portable stereos/tape players/radios; personal CD players, portable audio recorders/portable tape/radio players; headphones; MP3 players; solid state voice recorders; digital cameras and video cameras/camcorders.



VEHICLE AUDIO/VIDEO SYSTEMS (AFTERMARKET) \$2.75 EHF

Includes amplifiers, equalizers, speakers and in-dash audio/video components.



HOME THEATRE IN A BOX (HTB) SYSTEMS \$6 EHF

Includes pre-packaged disc player/speaker/amplifier systems for use with any type of video or television display to create a home theatre experience.



HOME AUDIO/VIDEO SYSTEMS \$3.50 EHF

Includes VCRs and DVD players; mini/mid/full size package systems; single/multi CD players; clock radios; digital cable equipment; satellite cable equipment; speakers (home speakers; home theatre speakers and multi-media speakers), amplifiers, receivers, data projectors and similar audio/video systems.



NON-CELLULAR TELEPHONES \$0.85 EHF

Includes wire telephones; cordless telephones and telephone answering machines.

For detailed information on any of these regulated products visit www.ACESstewardship.ca.

Solid Waste & Recycling, 2/23/2009

Canada-wide EPR action plan

A waste management approach that is gaining currency in Canada is the concept of the producers of products being responsible for their end-of-life management. Extended Producer Responsibility (EPR) is an environmental policy approach in which a producer's responsibility for a product is extended to the post-consumer stage of its life cycle. Through a Canada-wide Action Plan (CAP) for EPR, the Canadian Council of Ministers of the Environment (CCME) is seeking to provide guidance on the development and implementation of EPR programs, to strengthen the use of EPR as an environmental risk-management tool and to contribute to the harmonization and consistency of programs across the country.

A CCME CAP for EPR would seek the adoption by producers of full life-cycle cost accounting for their products. This would see the costs of the end-of-life management of products treated similarly to other factors of production and incorporated into wholesale and retail product prices. Successful EPR shifts the expenses associated with product end-of-life management from taxpayers to producers and consumers and reduces the amount of waste generated and going to disposal. In addition the Action Plan seeks to reduce the toxicity and environmental risks from products and product waste and improve the overall life-cycle performance of products, including reducing associated greenhouse gas emissions.

Canadian jurisdictions would agree to consider developing EPR framework legislation and/or to allow for action on the identified priority products and materials. The plan seeks to have the following products and materials incorporated into operational programs within a set time frame (e.g., six years) of the adoption of the CAP (Phase 1):

- Packaging
- Printed materials
- Compact fluorescents and other lamps containing mercury
- Electronics and electrical products
- Household hazardous and special wastes
- Automotive products

The following products and materials could be incorporated into operational programs within a set time frame (e.g., eight years) of the adoption of the CAP (Phase 2):

- Construction and Demolition materials
- Furniture
- Textiles and carpet
- Appliances, including ozone-depleting substances (ODS)

Key Performance Indicators

A number of key performance indicators have been identified to produce a national annual status report on the performance of the priority EPR programs. These include: kilograms per capita captured or recovered; dollars per kilogram captured or recovered; per cent of waste captured, per cent of waste recovered; and avoided greenhouse gas emissions.

Model EPR Program

In order to facilitate the creation of consistent and harmonious EPR regulations and programs, the discussion paper outlines a number of common elements that set out recommendations for all EPR programs to ensure

common interpretation and application. These elements include consideration of the responsibilities of designated producers and producer responsibility organizations, relationship to stewardship plans, the establishment of targets and reporting mechanisms, the creation of fees and design for environment.

The EPR program elements are designed so that through a successful EPR program, and the regulations which mandate it, cost and management signals are given to producers to improve the life-cycle performance of their products knowing that at some point in the future they will be responsible for the collection, recycling and the environmentally sound management of products that would otherwise be discarded.

Supportive Policies and Regulations

In a complex and competitive national and global business market signals to producers from a relatively small market like Canada may not be strong enough alone to influence new environmentally conscious product design and supply chain management. The environmental objectives of EPR may therefore need to be supported and reinforced by other measures, such as: eco-labelling; restrictions on toxic substances; recycled content standards and regulations; green procurement policies; environmental performance/voluntary agreements and a variety of other potential standards, bans, guidelines and educational tools.

A National Harmonized Approach

The purpose of a CAP for EPR would be to extend the principle of producer responsibility across the country in a consistent and harmonized way and maximized across the national marketplace. By shifting the responsibility for the end-of-life management of products to the manufacturer and/or importer of that product, effects will be felt throughout the product life cycle. This provides incentives to producers and importers to design their products with less environmental risk, reduced use of toxic and hazardous substances, enhanced ease of product disassembly and other factors reducing their products' overall environmental footprint.

For more information, visit www.ccme.ca

Table of Contents

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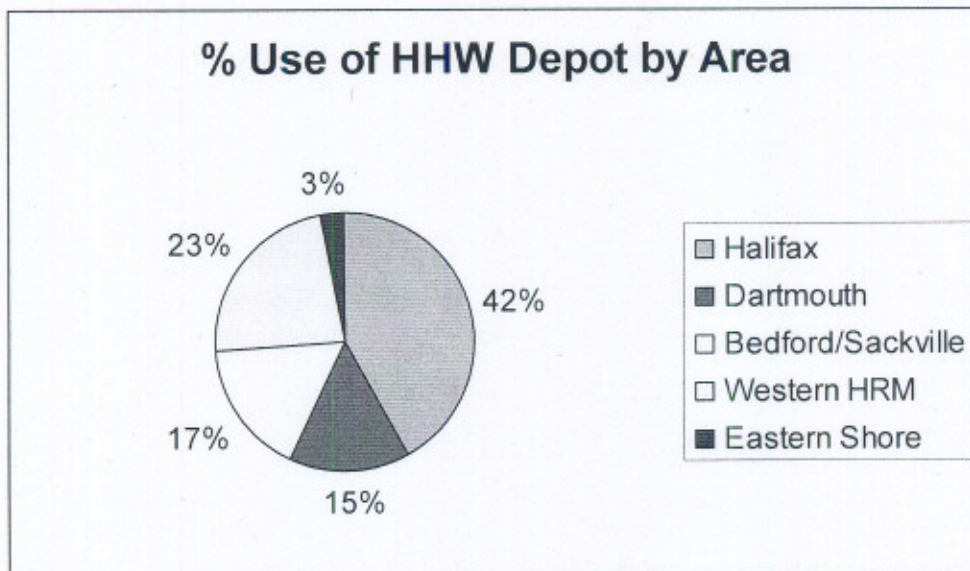
**HHW Depot (20 Horseshoe Lake Drive)
Usage by Area Based on 2008 Calendar Data**

Total Car Count = 7317

Total Events = 45

Avg Cars/Event = 163

Typical Breakdown of Patrons by Area	
Halifax	42%
Dartmouth	15%
Bedford/Sackville	17%
Western HRM	23%
Eastern Shore	3%



This information does not factor the four mobile events held in 2008.

Dartmouth

June 2008 – 434 cars

Sept 2008 – 174 cars

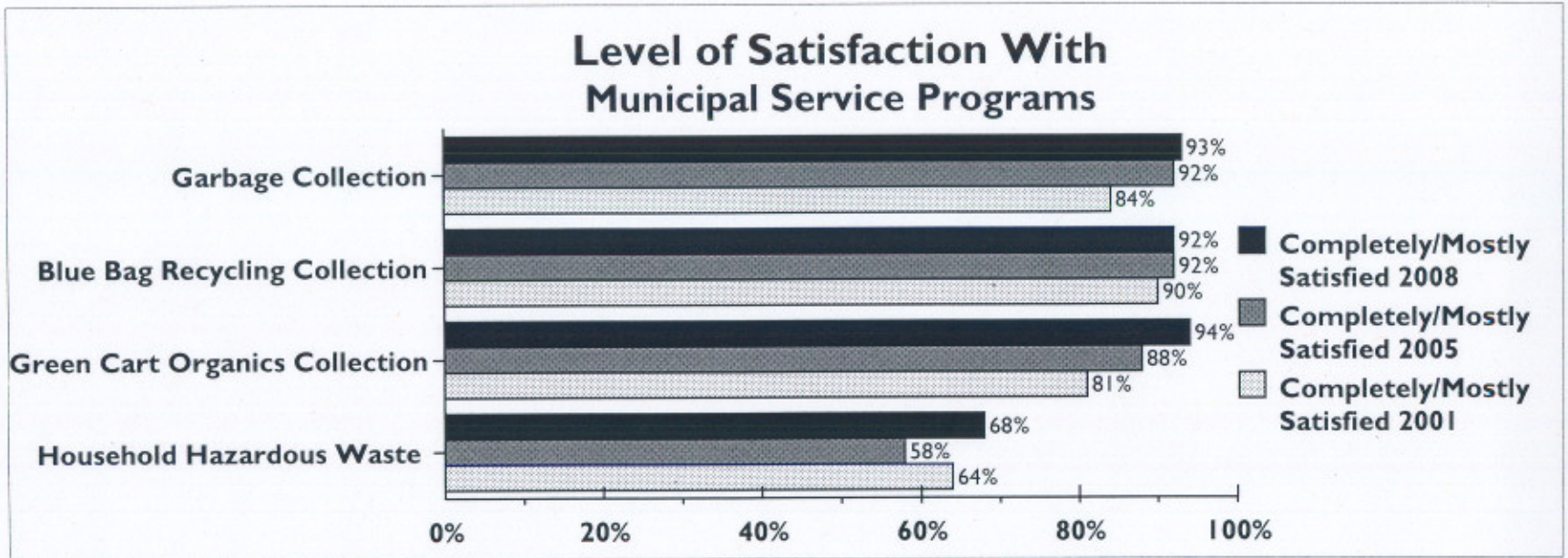
Beaverbank

Oct 2008 – 202 cars

Musquodoboit Harbour

Nov 2008 – 206 cars

Garbage Collection	93%	92%	84%
Blue Bag Recycling Collection	92%	92%	90%
Green Cart Organics Collection	94%	88%	81%
Household Hazardous Waste	68%	58%	64%



WasteLess E-Waste



Where can I recycle these electronics?

ACES



FAQ's Provincial E-Waste Program

Q: What is E-Waste?

A: The province has banned certain electronic items from landfill disposal. These items have been targeted for recycling in an industry developed and operated drop-off program.

- Televisions (TV's)
- Computers (including laptop and notebooks)
- Computer monitors
- Computer printers
- Computer CPU's
- Cables, mice, keyboards and other components within the computer
- Telephones (corded and cordless), Fax machines, Answering Machines
- Audio and Video Playback and Recording Systems
- Including radios, speakers, CD player, MP3 Players, stereos, digital cameras, video cameras and camcorders, VCR's, DVD's, clock radios, car stereo systems and home theatre in a box.
- Computer Scanners
- Cell phones* & Other Wireless devices (*See note next column)

Q: Why is E-Waste not collected?

A: E-Waste is not a municipal recycling program.

This program is operated by the Atlantic Canada Electronics Stewardship (ACES) which represents electronics manufacturers. The FREE DROP-OFF for e-waste is supported by point of purchase fees (fee you pay when you buy new electronic items). The program was approved by the Nova Scotia Dept of Environment.

Q: Where can I recycle E-Waste?

A: The following ACES drop-off depots in HRM accept designated e-waste (with the exception of cell phones and other wireless devices): These are:

Halifax Central	Bin Doctor Recycling Centre	2651 Clifton Street	434-6506
Halifax North	Tanners Transfer Ltd	3791 MacKintosh Street	454-4888
Dartmouth East	Bluenose Bottle Exchange	99 Woodlawn Road	435-7178
Dartmouth Burnside	Burnside Recycling	66 Simmonds Drive	468-9190
Sackville	Fader's Bottle Exchange Ltd	15 Sackville Drive	864-4343
Ingramport	Friends Depot	8134 St. Margaret's Bay Rd	857-9398
Lake Charlotte	The Recycle Market	11470 #7 Highway	845-2450

For information on these depots or if you have questions or concerns call 1-877-774-3260 or visit www.acestewardship.ca.

The location of the depots is administered by ACES.

*Q: Where can I recycle cell phones and other wireless devices?

A: Visit www.recyclemycell.ca for a location look-up by postal code or phone 1-888-797-1740.

There is NO FEE to drop items off for recycling.



Volumes Collected

