



PO Box 1749
Halifax, Nova Scotia
B3J 3A5 Canada

Item No. 4

**Halifax Regional Council
January 22, 2008**

TO: Mayor Kelly and Members of Halifax Regional Council

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

SUBMITTED BY: _____
Mike Labrecque, Director, Transportation & Public Works

DATE: January 11, 2008

SUBJECT: **Furniture, Appliances, and
Industry Electronic Waste Recovery Programs**

INFORMATION REPORT

ORIGIN

Regional Council, October 2, 2007.

Solid Waste/Resource Advisory Committee, November 22, 2007.

February 1, 2008 Industry Electronic Waste Recovery Program

BACKGROUND

This report is provided for the information of members of Regional Council regarding:

- A) Agenda Item 12.2 at the October 2, 2007 meeting of Regional Council; Councillor Smith - Amendment to Solid Waste By-Law S-600 re Ban of Furniture Products in Municipal Landfill;
- B) HRM Solid Waste /Resource Management program - management of used appliances; and
- C) The stewardship agreement between the province and the electronics industry of the Electronic Waste Recovery (End-of-Life) Program which commences February 1, 2008.

DISCUSSION

1) Furniture

The following motion was approved at the October 2, 2007 Regional Council meeting:

“MOVED by Councillor Smith, seconded by Councillor McCluskey, that the matter be referred to the Solid Waste Resource Advisory Committee (SWRAC) for discussion and report back to Council for ratification.”

At the November 22, 2007 meeting of SWRAC, staff distributed a handout (Attachment “A”) which provided an overview of the rationale for not amending By-Law S-600 for the purpose of banning the disposal of furniture products from the Otter Lake landfill.

As Attachment “A” details, although the banning of furniture from the Otter Lake landfill is consistent with HRM’s objective of maximizing waste diversion and minimizing disposal - the implications of adopting such a policy for furniture (or for any type of item or material) is typically the recommended last measure of a lengthy process of public education and outreach, promoting existing reuse opportunities, verifying and securing sustainable reuse opportunities, i.e. markets for the banned material; and after due consideration of the practicality, public acceptance and enforcement of the same policy - to achieve compliance. The amending of By-Law S-600 banning furniture from the Otter Lake landfill is not warranted at this time.

At the November 22, 2007 meeting, SWRAC did not support amending By-Law S-600 banning furniture from the municipal landfill. At the same meeting, SWRAC approved for staff to “issue a report to Council in reference to the procedures for furniture, appliance and electronic removal.”

Since 2002, HRM has promoted the reuse of furniture through such venues as:

- the back page of the Naturally Green newsletter where approximately 20 local goodwill - non profit agencies, many of whom accept, and some will pick up (at no cost) used furniture;
- the HRM website www.halifax.ca/wrms;
- the HRM Corporate Call Centre 490-4000; and
- community reuse events such as the annual “Dump and Run” event held each spring at the Dalhousie arena, when furniture can be dropped off and picked up for reuse.

HRM has promoted the annual “Dump and Run” event on the HRM website www.halifax.ca/wrms, and in local publications targeting university students. The February 2008 edition of the Naturally Green newsletter will contain an article promoting the reuse of furniture through local non-profit goodwill agencies and, if confirmed in time, the annual event at the Dalhousie arena.

2. Appliances

2.1 Containing CFCs/ODS:

Commencing in the early 1990's following the Montreal Protocol banning CFCs/Ozone Depleting Substances, the Metropolitan Authority initiated a recovery program of used appliances containing CFCs /ODS, i.e. freezers, air conditioners and refrigerators.

Since 1996, the recovery of CFCs/ODS has been one component of the HRM solid waste/resource management system. Once the CFCs/ODS have been removed from the appliance, and a sticker applied verifying that the CFCs/ODS have been removed, the item is eligible for residential collection on refuse collection week day. In 2007, a total of 3,799 service requests for the removal of CFCs/ODS (from freezers, air conditioners and refrigerators at residential properties) were completed.

2.2 All Appliances - Including CFCs/ODS:

HRM's appliance recovery program, the cost of which is included in the general tax rate, includes:

- the recovery/recycling of appliances as a component of the residential collection service. As specified in By-Law S-600, one bulky item can be placed at the curb for collection on each refuse collection day at a single family dwelling, and two large items at eligible multi unit properties; and
- the drop off of appliances at the Otter Lake facility from industrial/commercial /institutional properties. A small \$5.00 fee applies for dedicated loads of appliances received at the Otter Lake facility from ICI properties.

Between 1999 and 2006, an average of 4,121 tonnes of metal - the majority appliances, have been recovered and marketed from the Otter Lake facility. The very strong demand for metal, driven by China and India, has resulted in a 58% reduction in the tonnes of metal recovered annually and marketed from the Otter Lake facility, since the peak of 6,084 tonnes in 2001. A significant amount of metal is being marketed directly to local metal brokers, with less being received at the Otter Lake facility. The 07-08 Operating budget includes \$114,927 revenue for HRM from the sale of metal.

Many non-profit goodwill agencies also accept appliances in good working condition.

3. Industry Electronics (E-Waste) Recovery Program

On February 1, 2008, a new industry electronics E-Waste recovery program will be available to all residents of HRM - and the entire province. Through the establishment of drop-off centres, old computers (and peripherals such as mice, key boards, printers, etc.) and televisions will be recovered and disassembled for reuse/recycling. Through a stewardship

agreement approved by the Province, the program will be administered by the Resource Recovery Fund Board on behalf of the Atlantic Canada Electronics Stewardship (who is responsible for a provincial communications and education program of the new E-Waste recovery program).

ACES toll-free number for the E-Waste program is 1-877-774-3260.

Attachment "B" is a brochure from ACES containing information of their E- Waste recycling program.

In February 2009, the provincial E-Waste program will be expanded to include scanners, audio visual electronics, telephones and cell phones. Once implemented, the program will be the first comprehensive E-Waste recovery program in HRM - similar to existing programs in western Canadian provinces.

HRM will utilize the normal venues to communicate to residents the industry's E-Waste program including:

- the Corporate Call Centre 490-4000;
- the February 2008 edition of the Naturally Green newsletter;
- the HRM website for solid waste - www.halifax.ca/wrms; and
- issuance of a Public Service Announcement, prior to February 1, 2008.

At the time of the preparation of this report, the locations of the drop-off centres in HRM (and the remainder of the province) were not available.

HRM has expressed to the NS Department of Environment & Labour the importance of public convenience and recovery of all municipal costs with the compliance of the new Provincial regulations related to the industry's E-Waste program. Attachments "C" and "D" are correspondence from Mr. Dan English, Chief Administrative Officer to Mr. Bill Lahey, Deputy Minister, and a response from Ms. Nancy Vanstone, Acting Deputy Minister, respectively.

As contained in the Proposal for an End-of -Life Electronics Stewardship Program for Nova Scotia, submitted by the Electronic Product Stewardship Canada to and approved by the NS Department of Env & Labour, section 6.4 "Incidental Municipal Collection", the E-Waste recovery program will not be a cost for municipalities, and that all costs for the recovery of computers and televisions at landfills will be covered by the electronics industry. Staff have suggested that a format similar to the paint recovery program, where the RRFB arranges for the provision of containers for the storage of cans containing paint, and collection of the same from the Otter Lake facility, also be implemented for televisions and computers captured at the Otter Lake facility. HRM Solid Waste/Resources staff are awaiting discussion with the RRFB regarding the recovery of handling and storage costs of

computers and televisions pulled off the Otter Lake front end processor tipping floor and off the processing line.

Effective February 1, 2008, Provincial regulations ban the disposal of computers/peripherals and televisions at landfills in Nova Scotia. Commencing February 1, 2008, televisions and computers placed at the curbside of the road are not eligible for residential refuse collection. When old computers and televisions are placed at the curbside for residential collection, the resident will be advised to take the item(s) to a local E-Waste drop off-centre and /or to contact ACES/RRFB toll-free number for information.

Those residents who contact HRM will be advised that computers and televisions left at the curb are subject to the Solid Waste By-Law which requires removal of materials by 9:00 p.m. on collection day. Further, as per the requirements of the Streets By-Law, that the resident could be subject to the issuance of a SOT for computers and televisions left at the curb, should the item(s) not be removed within twenty-four hours of notification to remove the same. The cost of removal will be applied to their property tax.

BUDGET IMPLICATIONS

There are no budget implications as a result of this report.

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.

ALTERNATIVES

One alternative, which is not recommended, as detailed in this report is to amend By-Law S-600 banning the disposal of furniture from the Otter Lake landfill.

ATTACHMENTS

- Attachment "A": Presentation "Solid Waste By-Law S-600 Furniture, SWRAC November 22, 2007."
Attachment "B" Atlantic Canada Electronic Stewardship brochure.
Attachment "C": Letter dated July 12, 2007 to Mr. Bill Lahey, Deputy Minister, NSEL.
Attachment "D": Letter from Ms. Nancy Vanstone, Acting Deputy Minister, received September 17, 2007.

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 and Approve by : Jim Bauld, Manager, Solid Waste Resources 490-6606

Furniture, Appliances & Industry Electronic Waste
January 22, 2008 *Appendix A*

Solid Waste By-Law S-600 Furniture

SWRAC
November 22, 2007

1

Ban of Furniture Products in Municipal (Otter Lake) Landfill

- Motion at Regional Council, October 2, 2007, referred to SWRAC for discussion and a report back to Regional Council.

2

I) General Comment

- Banning of Furniture from the Otter Lake landfill – to further waste diversion and reuse of furniture, is consistent with HRM's objective of maximizing waste diversion/minimizing disposal – towards achieving the target of 60% waste diversion.

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I) General Comment

- HRM has supported and encouraged the reuse of good used furniture for the past 5 years by:
- Promoting approx. twenty (20) goodwill/non profit agencies on the back page of the Naturally Green newsletter (which is also linked on HRM's web site). Many of these agencies pick up and/or accept drop-off of good used furniture at residential and commercial properties.

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II) Staff's Analysis

There are many considerations with banning furniture from the Otter Lake Landfill.

A) Potential Benefits Include:

- Providing clients of goodwill agencies furniture that is usable or in good repair;
- Enhancing HRM's diversion rate,

Stakeholder/Business Unit Involvement:

- Local Furniture Banks, sheltered workshops, etc.
- T&PW – SWR
- Corporate Communications
- Legal Services
- Police – By-Law Enforcement
- MIRROR NS
- Residential Collection Contractors

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II) Staff's Analysis

(Note: potential tonnage of material diverted from Otter Lake landfill by banning furniture is unknown – no data available)

*Best estimate 3% of total waste stream = 4,800 tonne/year;
 If 50% reusable = 2,400 tonne/year*

Stakeholder/Business Unit Involvement:

- Unknown correct # of tonnes of furniture being diverted to furniture banks/goodwill agencies yearly

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II) Staff's Analysis

B) Potential Challenges:

- i) Determine what furniture is included (and excluded) in the disposal ban, i.e. criteria what is "good"?

Comments:

- Only good (i.e. non soiled, dry, non broken) items – mattresses, sofas, etc banned;
 - Who determines what is not acceptable/banned at Otter Lake – and at the curbside;
 - How is the public informed of what furniture is banned and what isn't.
- Stakeholder/Business Unit Involvement:
 - Legal – definition "furniture", amendment to By-Law S-600
 - T&PW – SWR – (MIRROR & Residential Contractors)
 - Corporate Communications
 - Call Centre

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II) Staff's Analysis

- ii) How is the ban enforced?

- Banned furniture (stickered) rejected at the curb by residential contractor.

(Note: HRM's Collection and Transportation of Source Separated Solid Waste contract scope of work does not include identifying banned furniture and rejecting same at the curb. By-Law S-600 (since 1999) allows one bulky item per household on refuse week for disposal.)

(Note: amendment to By-Law S-600 required before enforcement applies.)

- Stakeholder/Business Unit Involvement:
- T&PW – SWR/Residential Collectors
- HRM Residents (req'd to store old furniture, keep clean, dry and in good repair, i.e. indoors)
- Legal
- Public Hearing

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II) Staff's Analysis

iii) What happens to the banned furniture rejected at the curb?

A) If not removed by the homeowner, complaint received by HRM;

- By-Law Enforcement engaged;
- If not removed after 24 hours, HRM has item(s) removed & stored/taken to?

■ Stakeholder/Business Unit Involvement:

- Call Centre
- Police -- By-Law Enforcement
- T&PW

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II) Staff's Analysis

B) Removed from the curb by the resident

■ Stakeholder/Business Unit Involvement:

- Resident may:
 - Call or take to local goodwill agency,
 - Leave item on the property (where it will decay and become unsightly, or
 - Illegally dispose of the item.

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II) Staff's Analysis

iv) Is there a demand and capacity locally for banned furniture?

(Note: Landfill bans should be market driven, i.e. proven/verified that the volume of banned furniture can readily & continually be utilized by local goodwill/non profit agencies)

■ Stakeholder/Business Unit Involvement:

- Meet with local non profit/goodwill agencies to verify the type/condition/quantity (i.e. capacity) for furniture.
- Reports of some agencies only require specific type of furniture and/or limited number.

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II) Staff's Analysis

■ Alternatives to a Ban:

- a) HRM continue to promote the reuse of furniture through the Naturally Green newsletter and web page;
- b) Serve as a public voice for goodwill/non profit agencies desiring furniture (i.e. expanding reuse campaign in Naturally Green/HRM web page;
- c) Issue a RFP for the private sector to provide the collection, refurbishing and delivery of furniture to goodwill agencies.

■ Stakeholder/Business Unit Involvement:

- T&PW – SWR
- T&PW – SWR
- Call Centre
- T&PW – SWR (Council approval required, Budget implications)
- Not recommended at this time.

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Preliminary Conclusions

1. Unknown if banning furniture from Otter Lake landfill can be effectually and efficiently administered;
2. Traditionally, recovery of good used furniture is by the private sector – promoted by the HRM. (Local non profit/goodwill agencies eligible for financial assistance from HRM Grants Committee);
3. Questionable if a ban on furniture will result in additional usable furniture being diverted to local nonprofit/goodwill agencies.

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Next Steps

- Staff prepare a report for SWRAC, detailing potential benefits/challenges and budget implications to be forwarded to Regional Council;
- Discuss with local goodwill/sheltered workshops to verify the type, condition and quantity of furniture required for their clients and capacity for storage.

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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 unwanted electronics go?

A: The electronics will be transported to a consolidation centre where they will be sorted for processing. From there, all material will be transferred to approved processing and recycling facilities. Recyclers will be required to meet Electronics Product Stewardship Canada's (EPSC) Electronics Recycling Standard (www.epsc.ca/recycle), which outlines the requirements for environmentally sound recycling in accordance with appropriate health, safety and export provisions.

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. However, for your own personal security, you should take steps to make sure that private data is removed from your computer. When your unwanted electronic product is recycled, every effort is made to ensure the privacy and security of any personal information; however, the ACES program cannot accept liability for data that was left on the computer.

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 Electronic 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.

ACES contracted the Resource Recovery Fund Board Inc. (RRFB Nova Scotia) to administer the program. RRFB Nova Scotia looks after a wide range of waste diversion, recycling and stewardship programs including the beverage container and leftover paint recycling programs and the used tire management program. RRFB Nova Scotia also funds municipal recycling, composting and environmental education programs, along with business development programs that transform waste materials into new opportunities.

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

A: All ACES Drop-off Centres accept large volumes of unwanted electronic material. Please contact ACES at info@acestewardship.ca or 1-877-774-3260 to find an ACES Drop-off Centre near you and schedule a delivery.

You've got the power. Recycle it.



ACES
Atlantic Canada
Electronics Stewardship

www.ACESstewardship.ca

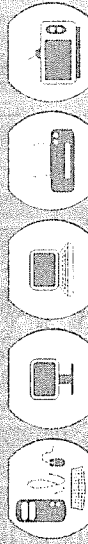
Q Where can I recycle my unwanted TV, computer, monitor or printer?

A



ACES
Atlantic Canada
Electronics Stewardship

To find an ACES Drop-off Centre contact:
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 an industry-led electronics recycling program approved by the Province of Nova Scotia and available to all consumers and businesses in the province. Beginning February 1, 2008, Nova Scotians will be able to recycle unwanted computers, monitors, printers and televisions responsibly by dropping these items off at an ACES Drop-off Centre.

Q: Why do I have to recycle my unwanted electronics?

A: As of February 1, 2008, certain electronic products regulated under Nova Scotia legislation are banned from disposal in Nova Scotia's landfills. This material must be recycled under the ACES Program. Materials found in electronic items such as steel, glass, copper, aluminum, plastic and precious metals can be extracted and recycled into new products. The ACES Program makes sure that these materials are recycled responsibly.

Q: How is the ACES program funded?

A: An Environmental Handling Fee (EHF) will be applied to the sale of new products regulated under the Nova Scotia Electronic Products Stewardship Program Regulation. All of the program revenue will be used for the administration, collection, transportation and responsible recycling of unwanted electronics in Nova Scotia. The implementation of the fee coincides with the start up of the ACES program, February 1, 2008.

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

A: As of February 1, 2008, the following electronic products are regulated in Nova Scotia and are accepted in the ACES Program:

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 and tablet PCs.

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.

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

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

Q: Why can't I put unwanted electronic material out with my garbage?

A: Effective February 1, 2008, computers, monitors, printers and televisions are banned from disposal in Nova Scotia's landfills. This material is now regulated under Nova Scotia's Electronic Products Stewardship Program Regulation and must be recycled through an ACES Drop-off Centre.

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: Can I return my stereo, DVD player, or cell phone?

A: No. These items come under the next phase of the Nova Scotia Electronic Products Stewardship Regulation which takes effect in February 2009. Computers, monitors, televisions and printers that are integrated into non-program products, such as vehicles or industrial equipment, are currently excluded from the program.

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

A: Absolutely. The ACES Program is designed to manage unwanted electronic products that have exhausted their 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.



P.O. Box 1749
Halifax, Nova Scotia
B3J 3A5 Canada

January 22 / 08

503
Furniture, Appliances &
Industry Electronic Waste
Appendix C

12 July 2007

Deputy Minister Bill Lahey
Nova Scotia Dept. of Environment & Labour
PO Box 697, 5151 Terminal Road
Halifax, Nova Scotia B3J 2T8

Dear Mr. Lahey:

RE: Electronic E-Waste Recovery Program

HRM encourages and looks forward to the launch of the first phase of the provincial Electronic E-Waste Recovery Program in 2008. A successful provincial E-waste recovery program will move HRM closer to the Provincial 2015 goal of 300 kg/per capita waste disposed.

At a recent meeting of the Regional Waste Coordinators, HRM staff were advised by NSEL staff that HRM should notify the province of our preference for the future E-waste recovery program, for those E-waste products hidden in refuse received at the Otter Lake facility.

It is HRM's preference that the Otter Lake facility not be a public drop off centre. It is suggested that the recovery program for electronics be similar to the paint recovery program at the Otter Lake facility, where RRFB provides a large container for the temporary storage of paint, HRM is reimbursed for handling and the RRFB arranges for collection and recovery of the paint at no cost to HRM. HRM is prepared to make the best effort to pull end-of-life electronics off the tip floor/from the sort lines in the FEP, and will be seeking handling costs, collection and recovery to be the responsibility of the company chosen to administer the new provincial end-of-life electronics program.

Similar to the operational procedure for tires at the Otter Lake facility since 1999, E-waste products observed in the collection vehicle from the ICI sector at the scale house or tipping floor, will be redirected to the appropriate E-waste recovery centre. The location of several E-waste recovery centres throughout the HRM is encouraged for public convenience. Thank you for your consideration of this request.

Yours truly,

Dan English,
Chief Administrative Officer

Copy: Wayne Anstey, Deputy CAO, Operations
Brad Anguish, P. Eng., Director, Environmental Management Services
Jim Bauld, Manager, Solid Waste Resources
Jennifer Church, HRM Intergovernmental & Corporate Affairs
Bill Ring, CEO, RRFB
Kurt Jacobs, President, MIRROR NS

CHIEF ADMINISTRATIVE OFFICE
Dan English, Chief Administrative Officer
PO Box 1749, Halifax, NS B3J 3A5
Tel: (902) 490-6430 Fax: (902) 490-4044
E-mail: englisd@halifax.ca Web Site: www.region.halifax.ns.ca

AMJ
10/13/07



Environment & Labour

PO Box 697
Halifax, Nova Scotia
B3J 2T8

Bus: (902) 424-4148
Fax: (902) 424-0575

Frank —
Rob — 503
E waste

Our File Number: 10350-40

Office of the Deputy Minister

Jim Baud

*Furniture, Appliances &
Industry Electronic Waste
January 22, 2008*

Appendix D 94400-30/HRX-48

SEP 17 2007

RECEIVED
SEP 27 2007

Halifax Regional Municipality
SEP 26 2007
Chief Administrative Office

Dan English
Chief Administrative Officer
Halifax Regional Municipality
P.O. Box 1749
Halifax, NS B3J 3A5

Dan

Dear Mr. English:

Thank you for your letter dated July 12th regarding Nova Scotia's electronic product stewardship program.

As you are aware, Electronic Product Stewardship Canada, on behalf of industry, has recently submitted a proposal for an end-of-life electronics stewardship program for Nova Scotia. The draft proposal underwent public consultation from July 12th to July 25th. The final proposal is currently under review by Department staff.

The Department is aware of the importance of compensating municipalities appropriately for the incidental collection and handling of e-waste at municipal sites. The convenience of collection sites is also important to the success of the program. We will take your concerns into consideration during our review of industry's plan. I have also forwarded your comments to Mr. Dale Lyon, Executive Assistant at RRFB Nova Scotia. As program administrator for the proposed plan, the RRFB will be responsible for the province-wide collection of e-waste.

I look forward to a successful e-waste program in Nova Scotia.

Sincerely,

Nancy Vanstone

Nancy Vanstone
Acting Deputy Minister

cc: Dale Lyon, RRFB