



# Electronic Products Recycling Association Product Stewardship Plan

*February 4, 2013*

In response to **Newfoundland and Labrador Regulation 85/12**

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*Waste Management Regulations 2003, Environmental Protection Act (O.C. 2012-288)*

Submitted to Multi-Materials Stewardship Board (MMSB)

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## TABLE OF CONTENTS

1.0 INTRODUCTION.....	3
2.0 PROGRAM SUMMARY .....	4
3.0 PROGRAM PLAN REQUIREMENTS.....	6
a) COLLECTION OF E-WASTE.....	6
b) MANAGEMENT OF E-WASTE.....	8
c) TARGETS & TIMELINES.....	9
d) PLAN FOR ACHIEVING PERFORMANCE TARGET.....	10
e) DESCRIPTION OF PLANNED ACTIVITIES.....	10
f) DESCRIPTION OF EFFORTS.....	11
g) COMMUNICATIONS PLAN.....	11
h) COLLECTION FACILITIES.....	12
i) CONSULTATIONS.....	12
j) LISTING OF BRAND OWNERS.....	13
k) QUALIFICATION STANDARDS.....	14
l) COST MANAGEMENT FOR IMPLEMENTATION.....	16
m) FEES.....	17
n) INDEPENDENT AUDITOR.....	18
o) ENVIRONMENTAL IMPACTS.....	18

## LIST OF APPENDICES

Appendix A – Product Definitions and Clarifications

Appendix B – Recycler Qualification Program for End-of-Life Electronics Recycling

Appendix C – Collection Site Approval Program (CSAP)

Appendix D – An Industry-led Stewardship Approach for End-of-Life Electronic Products in Newfoundland and Labrador, Jupia Consultants Inc.

Appendix E – EPRA Newfoundland and Labrador Communications Launch Plan and Sustaining Activities

Appendix F – Atlantic Quarterly® - Autumn 2011 Newfoundland and Labrador Results

Appendix G – Stewards List

## **1. Introduction**

Electronic Products Recycling Association (EPRA) is pleased to present a stewardship plan for the development and implementation of an End-of-Life Electronics (EOLE) Stewardship Program for Newfoundland and Labrador (NL), as per the requirements of *Regulation 85/12*.

EPRA is a not-for-profit association and is incorporated so as to permit its existence in every Province and Territory in Canada. Canada's electronics industry created EPRA in 2011, as the national not-for-profit entity, chartered with improving the efficiency and effectiveness of Canada's industry-led and regulated electronics stewardship programs.

Members of Electronics Product Stewardship Canada and the Retail Council of Canada established EPRA. The EPRA Board of Directors includes senior executives from EPSC and RCC member companies and Canadian electronics distributors. The inaugural EPRA Directors are:

<b>Name</b>	<b>Position</b>	<b>Company</b>
Grant McTaggart	Vice President, Administration	Best Buy
Clint Mahlman	Senior VP of Operations	London Drugs
Lloyd Bryant	Vice President and General Manager, Imaging and Print Group	Hewlett Packard Canada
Mike Watson	Director of Compliance	Dell Global Takeback
Nick Aubry	Director, Environment, NPC, Vendor Management	Sony Canada
Rene Zanin	General Counsel	Toshiba of Canada Ltd.
Peter Gibel	Vice President, Merchandising	Staples
Harry Zarek	President and CEO	Compugen
Mary Ann Yule	CEO	CDW
Allen Langdon	Vice President, Sustainability	Retail Council of Canada

Established in 2007, Atlantic Canada Electronics Stewardship (ACES) operates industry-led and regulated electronics recycling programs in Nova Scotia and Prince Edward Island. On August 1, 2012, ACES transitioned<sup>1</sup> into the growing EPRA network of industry-led, not-for-profit electronics stewardship programs across Canada. This transition benefits both stewards and consumers by strengthening our ability to deliver best practices. Standardized, effective policies and processes will increase efficiencies, reduce administrative costs and improve service quality.

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<sup>1</sup> For purposes of clarity, we will use "EPRA" as the program name in this document, which covers both our proposed way forward in Newfoundland and Labrador, as well as the previous and current operations of "ACES" in Atlantic Canada.

EPRA is registered with the NL Registry of Companies to conduct business in the province. EPRA currently is operating in Atlantic Canada under the “ACES” brand and has extensive experience managing end-of-life electronics recycling programs. Presently, more than 500 companies are registered with the EPRA program in Nova Scotia and Prince Edward Island, fulfilling their environmental compliance to provincial recycling regulations.

EPRA has structured this document to address the provisions required in Section 31.23 of NL **Regulation 85/12**. It is our hope that this approach will assist in an efficient review of our plan, so that we may move forward with establishing a comprehensive program to ensure the collection and responsible recycling of end-of-life electronics throughout Newfoundland and Labrador.

## **2. Program Summary**

This document outlines EPRA’s proposed plan to divert and responsibly handle regulated EOLE from disposal in landfills and/or illegal export.

Under this discussion document, regulated electronic products will not only be diverted from landfill, but also from illegal export, by promoting the options of reuse for unwanted products in working order (where in-province reuse opportunities) exist and the collection and recycling of unwanted products at their end-of-life. These two options will be emphasized in a communications and public awareness strategy, which will maximize participation in a formalized stewardship program.

As per Section 31.18(f) of the Regulation, the broad regulated product categories EPRA will cover as part of this product stewardship plan include the following (whether intended for the consumer or industrial/institutional/commercial (ICI) sectors):

- i. Desktop (e.g. CPUs) & Portable Computers (e.g. tablets, laptops), including: associated keyboards, mice and cables;
- ii. Display Devices including: televisions, computer monitors and all-in-ones;
- iii. Desktop Printers, Scanners and Fax Machines;
- iv. Personal/Portable Audio/Video Playback and/or Recording Systems;
- v. Home Audio/Video Playback and/or Recording Systems
- vi. Home Theatre-in-a -Box (HTB) Systems;
- vii. Vehicle-based Audio and Video Systems (aftermarket only);
- viii. Non-Cellular Telephones and Answering Machines; and,
- viv. Cellular Telephones and Accessories

As part of the program development and implementation of the program, EPRA will develop detailed product definitions and inclusions/exclusions, based on the Regulated electronic products, which are harmonized with other provincial jurisdictions. An example of such is attached as ‘**Appendix A**’ currently operational in our Nova Scotia and Prince Edward Island

programs. The addition of any other regulated electronic products would require consultation with EPRA prior to implementation.

While we understand that the Canadian Wireless Telecommunications Association will submit a program plan for regulated cellular products under its RecycleMyCell.ca brand, EPRA will also be in a position to collect these products should obligated stewards approach us for their compliance to the regulation.

EPRA's successful approach is based on a shared responsibility model where brand owners, retailers, consumers, and government all have a role to play.

Obligated stewards will be responsible for providing the collection and recycling program that will manage all electronics waste (e-waste) items identified in the applicable legislation.

They also will be responsible for ensuring that an Environmental Handling Fee (EHF) is applied to the supply of new electronic products designated in legislation, along with remitting the funds to EPRA to cover all aspects of the program, including: collection, transportation, responsible recycling, public awareness and administration.

Consumers<sup>2</sup> may pay the EHF on these designated new electronics items at the point-of-purchase<sup>3</sup>. Consumers and businesses will be able to drop-off their e-waste items at a designated drop-off site without charge and with assurance that these items will be recycled responsibly. E-waste from the ICI (industrial, commercial and institutional) sector will also have the option of scheduling drop-offs for large quantities of e-waste. Contracted recyclers for the program will be required to meet the Electronics Recycling Standard (ERS). For more info on the standard and EPRA's Recycler Qualification Office, see '**Appendix B**' and section 3(k) of this document.

The provincial Government will be responsible for enforcing legislation and ensuring full program compliance by all producers/retailers/distributors either selling or distributing into Newfoundland and Labrador designated program materials.

We understand that in addition to an annual administrative fee reflecting the costs incurred by MMSB<sup>4</sup> as defined under Sections 31.30 and 31.32; MMSB may also offer services which would be beneficial to EPRA in delivering our commitments outlined in this Stewardship Plan. Should EPRA desire to secure the services of MMSB for an activity outside of those MMSB is obligated to carry out in fulfilling its duties under the Act and the regulations, this would be treated as a separate agreement and would be subject to our mutual agreement.

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<sup>2</sup> Consumers means buyers – this also extends to businesses, including Industrial, Commercial and Institutional – the ICI sector

<sup>3</sup> Point-of-Purchase - usually means a retailer but also might be an internet vendor or for businesses it may mean a wholesaler or even manufacturer

<sup>4</sup> MMSB means Multi-Materials Stewardship Board

In the event that EPRA is found to be deficient in the delivery of their obligations as outlined in the regulations, MMSB will advise EPRA of such deficiencies and will provide EPRA reasonable timelines to resolve such deficiencies. Should the deficiencies remain unresolved such that MMSB must act to ensure EPRA's obligations are met, MMSB will levy fees upon EPRA to cover the costs of such actions. In these circumstances, MMSB will advise EPRA that fees are to be remitted in accordance with section 31.31 and will provide EPRA with an itemized listing of what actions were carried out accompanied by their respective cost as part of the total fee.

EPRA will launch the program on August 1, 2013 and it is the intent of EPRA to have the program become self-sustaining and operate for the initial 5-year approval period, as stated in the Regulation. The following are the projected key milestones leading up to August 2013:

MMSB Approval of EPRA Stewardship Plan	February 15, 2013
EPRA submission of obligated stewards	February 28, 2013
EPRA Atlantic NL Program Manager hired	April 1, 2013
EPRA issues 90-day notice to obligated stewards, online registration available	May 1, 2013
Official EPRA NL Program Start Date	August 1, 2013

### **3. Program Plan Requirements (as outlined in Section 31.23 of NL Regulation 85/12):**

#### ***3(a): the collection of e-waste in the province, including the collection of the e-waste of other brand owners through an electronic stewardship program:***

EPRA will recruit and employ a local program manager to lead our efforts in Newfoundland and Labrador. In part, this individual will be responsible to:

- collect program materials in all areas of the province through the development of a network of drop-off sites to provide adequate, appropriate and convenient free of charge drop-off service;
- form strategic partnerships to conduct periodic special collection events;
- transport the collected materials to a consolidation point;
- make every effort to maximize program-related activities within the province, where these activities (i.e. collection, transportation and consolidation) can be demonstrated to be economically feasible and efficient; and,
- follow the provisions outlined in EPRA's Collection Site Approval Program (CSAP – see '**Appendix C**').

EPRA will establish a collection and processing network based on a fee for service model where entities providing collection, transportation, and processing services will receive a payment for participating in the Program. Service providers selected by the Program will receive a weight-based financial payment for the volume of designated products handled under the Program. Selection criteria are expected to include experience in delivering these services, facility and process standards related to environmental and workplace health and safety, coverage area,

and others. The resulting collection system will be one that best addresses the needs of the Program.

EPRA will seek to enter into agreements with a variety of organizations to provide collection services for designated products, including Green Depots, retail locations, charitable organizations, waste collection companies, and municipalities.

EPRA will establish approximately 17 to 19 permanent drop-off locations throughout Newfoundland and Labrador in or near the following locations in year 1 of the program;

1. City of St. John's (up to 3 sites)	7. Bay Roberts	13. Porte Aux Choix
2. City of Mount Pearl	8. Carbonear	14. Stephenville
3. City of Corner Brook	9. Gander	15. Port Aux Basques
4. Conception Bay South	10. Grand Falls / Windsor	16. Happy Valley - Goose Bay
5. Marystown	11. Lewisporte	17. Labrador West
6. Clarenville	12. Deer Lake	

Of the 17 to 19 sites identified, EPRA will work to operationalize as many as possible by the program launch date, with the intention of having all operational by the end of year 1 of the program. During years one and two, EPRA will implement a collection service (available at least once annually) in or near each of the following 31 additional communities identified by MMSB:

1. Riverhead	12. New Wes Valley	23. Cartwright
2. Dunville	13. Gambo	24. Charlottetown
3. Bonavista	14. Pasadena	25. St. Lewis
4. Twillingate	15. Baie Verte	26. Hopedale
5. New World Island	16. La Scie	27. Postville
6. Fogo	17. Burgeo	28. Makkovik
7. Glovertown	18. Rocky Harbour	29. Nain
8. Robert's Arm	19. St. Anthony	30. Rigolet
9. Springdale	20. L'Anse Au Loup	31. Black Tickle
10. Botwood	21. Mary's Harbour	
11. St. Alban's	22. Port Hope Simpson	

This collection network will be assessed on an ongoing basis in terms of effectiveness and consumer convenience.

EPRA will also engage MMSB, municipalities and other recycling organizations to review and develop a list of sites where special collection events could be pursued. EPRA will engage other recycling agencies operating in these rural areas to determine if there is an opportunity to share resources, reduce costs and increase efficiency.

Despite the best of communication and awareness efforts to encourage and direct public participation in any regulated stewardship program, EPRA recognizes that full compliance from the residential and ICI sectors is difficult to achieve. Municipal Solid Waste Landfill Sites would likely receive some program materials after an electronics recycling program is introduced to Newfoundland and Labrador. They would be naturally positioned and have the infrastructure to receive all waste streams and thus some NL residents may continue to place end-of-life or unwanted electronic products in their garbage bags or bins after legislation is in place. These items would then inadvertently be collected by waste haulers and may arrive for disposal at a provincial landfill.

Therefore, EPRA would investigate the potential for locating storage containers at all appropriate municipal sites. This would accommodate residents and haulers, encouraging them to separate program materials from the waste stream and provide temporary storage of program materials until directed into the collection and recycling stream. An arrangement would also address proper handling and storage (i.e. covered and secured), pickup at no charge and would continue for the duration of the program unless other arrangements are reached. However, no collection fees would be paid at these sites. Further, emphasis would be placed on program awareness in order to direct the public to the appropriate outlet for their waste electronics and EPRA would provide printed materials to assist in this effort.

To ensure that the proposed network of drop-off sites in Newfoundland and Labrador is convenient, EPRA will establish service criteria for collection.

***3(b) the management of e-waste in adherence with the following, in order of preference:***

***(i) reuse:*** Reusing unwanted electronic products will be promoted through the communications and public awareness program as the first option where markets and opportunities for reuse in-province exist. For Newfoundland and Labrador residents considering this option, caution should be exercised and particularly with respect to protection of personal information. EPRA will work with local charitable entities to explain the Electronics Reuse & Refurbishing Program (ERRP) and assist with their qualification. Obligated products that are used or refurbished will not attract an EHF.

EPRA's approach to reuse and refurbishment is consistent with the industry's position that it be in compliance with Canada's Basel Convention commitments and not allow end-of-life electronics management challenges to be passed on to less developed countries.

***(ii) recycle, (iii) recover, and (iv) dispose:*** Recycling or processing of unwanted and end-of-life electronics will be promoted as the final option. Recycling, which diverts electronics waste from landfill and illegal export, will be a major focus of the EPRA program. Typically, recycling involves some form of "primary" or initial processing, which may include dismantling and sorting of material by hand or by more elaborate mechanical means. Further manual or mechanical separation of materials by another vendor or vendors is considered "downstream" processing. Material flows will be tracked to their "point of final processing" (i.e. where they

are altered into a new product or state) or, for unrecyclable hazardous materials, to their point of disposal (i.e., where they are disposed of in an environmentally sound manner).

All recycling will be completed by contractors who meet the Electronics Recycling Standard (ERS) and who have successfully completed EPRA's Recycler Qualification Program (RQP), both of which may be updated from time to time in order to ensure they meet the ongoing needs of the programs which have adopted them.

To ensure that all materials collected under an EPRA program will be responsibly recycled, EPRA has established the following criteria for service:

- Service providers will successfully complete the RQP prior to receiving any collected EPRA program materials for processing; and
- Service providers will be responsible for ensuring that any and all (downstream) processors needed for further/additional processing of program materials (after primary processing) have also successfully completed the RQP prior to receiving any collected EPRA program materials for processing.

***3(c) the brand owner's expected performance target and timelines for both the recovery amounts of e-waste and the reuse or recycling rates of the collected e-waste:***

In 2009, EPRA-led programs across Canada conducted extensive research of electronics program operations worldwide with the goal to track and report key performance metrics relevant to the electronics industry in Canada.

In 2010, these research findings led to the creation of Key Performance Indicators (KPIs) that enable regulated and industry-led electronics stewardship programs across Canada to:

- Benchmark and consistently measure annual performance;
- Align and compare metrics across the country; and,
- Communicate performance to government and other stakeholders.

In Newfoundland and Labrador, EPRA would implement the following established metrics to evaluate program performance on a 12-month reporting period:

- Operations
- Access
- Awareness
- Financial

Calculating the estimated weight of EPRA-collected end-of-life electronics in the initial years of the program in Newfoundland and Labrador is a complex issue. Our experience in Atlantic Canada to date, and elsewhere in Canada has shown that a number of factors will have a major impact here, including:

- The willingness of NL residents and entities to "take action" and bring their EOLE to an EPRA collection point or event;

- The relative age and weight profile of historic and orphan electronic waste currently stored by NL residents and entities, as industry trends clearly indicate that newer products are becoming significantly lighter;
- The ability for EPRA to find suitable business arrangements with various contractors for the collection of EOLE across the province; and,
- The pace by which the regulated landfill ban on EOLE will take effect across the Province.

Given this uncertainty in the market, EPRA estimates that approximately 1000 metric tonnes of Newfoundland and Labrador’s end-of-life electronics will be collected and responsibly recycled in the first full year (2014) of operation. We anticipate that the program could achieve a 5% increase in each of the following two years (2015 and 2016).

**3(d): the brand owner’s plan for achieving at least that performance target:**

EPRA has a proven track record of creating and delivering successful and sustainable electronics stewardship programs in Canada. Our plan to achieve this level of performance in Newfoundland and Labrador would be to focus on the following three priority areas of program development and implementation, in order to successfully establish and sustain broad engagement and long-term participation in electronic waste recycling in the province:

- Awareness – educating and informing consumers and businesses about the environmental benefits and importance of diverting electronic waste from local landfills (see ‘Appendix E’ for details).
- Access – building an accessible network of collection facilities/depot centres that recognizes the mix of urban centres and rural communities, which are spread over a large geographic area.
- Landfill Ban – in tandem with developing and delivering a strategic program plan for electronic waste recycling, EPRA would strongly support a ban on disposing of electronic waste in landfills. Recognizing the significant positive impact that a landfill ban has on establishing the desired recycling behavior among target audiences, and ultimately diverting electronic waste, EPRA would work in partnership with municipalities (and regional waste management organizations) to support appropriate communications outreach.

**3(e): a description of the planned activities, which will be undertaken to influence the redesign of electronic products to improve reusability, recyclability and to reduce e-waste;**

Electronics Product Stewardship Canada (EPSC) represents major electronics and IT equipment brand owners in Canada on sustainability issues. EPSC issues its *Design for Environment (DfE) Report*, which highlights the industry’s progress related to design for the environment, along with the many technological advances that are creating change in electronics design. Developments in cloud computing, for example, are



opening the door for smaller and lighter products. Eco-labelling programs challenge manufacturers to develop products that have a lower energy or materials footprint. This year's report builds on previous reports, with a focus on building sustainability into new product design. EPRA will report annually on DfE issues as provided through this research.

***3(f): a description of the efforts made by the brand owner to maximize the local economic benefits created through the implementation of the electronic product stewardship plan:***

EPRA engaged economist David Campbell of Jupia Consultants to explore some of the benefits of the ACES program. His report entitled "The Benefits of an Industry-Led Stewardship Approach for End-of-Life Electronic Products in Newfoundland & Labrador" (**Appendix "D"**) outlines the following benefits;

1.	Annual Projected Revenue	\$3,800,000
2.	Projected Total Gross Domestic Product	\$2,900,000
3.	Total Employment (FTE's) Projected	50
4.	Projected Employment Income	\$1,600,000
5.	Projected Consumer Spending	\$1,200,000
6.	Taxation (income, HST, property)	\$390,000

EPRA will establish an electronic waste recycling program in Newfoundland and Labrador with a continued focus on delivering sustainable local investments.

***3(g): a communications plan for informing consumers of the brand owner's electronic product stewardship plan:***

Efforts related to communication and public awareness will be carried out as follows:

- To ensure that consumers are aware of the Program and have knowledge on how and when they can have their products recycled, promotional material will be on-hand at collection depots (eg. Question and answer pamphlets, posters, and other signage), supplemented by various media spots (eg., newspaper and radio advertisements), a Program web site and call center services.
- Stewards and sellers of designated products will be provided with point-of-sale education material to ensure that consumers are aware of the applicable EHSs and reuse and recycling options. Following program commencement, a more detailed communications program may be developed.
- A survey program will also be implemented by the program once it has been established. The intent of this would be to gauge consumer knowledge on the program and seek input on potential program improvements. Survey participants may be asked about recent recycling activities pertaining to the Program, their knowledge of where designated products can be taken etc.
- Where substantive program changes are proposed (e.g., incorporation of additional products) the program will consult as required.

- In addition to the steps identified above, the Program is committed to transparency and will ensure that industry proposals, program plans and annual reports are sufficiently communicated to all stakeholders.

See 'Appendix E' for the marketing and communications plan to launch the EPRA program in Newfoundland and Labrador, and sustain ongoing outreach activities in alignment with program operations.

***3(h): the establishment of return collection facilities or other return collection methods that will ensure reasonable and free consumer access for the return of e-waste:***

The following measures will be implemented to monitoring the reach and accessibility of the EPRA collection network in Newfoundland and Labrador.

A toll-free helpline will be used as a primary tool to monitor public feedback on both geographic/population coverage and customer service levels provided by our drop-off centre network. All calls relating to these key elements will be recorded and reviewed regularly by the Program Manager and addressed/resolved promptly, with the exception of concerns relating to geographic coverage which will be reviewed regularly, but at pre-determined intervals.

With respect to geographic/population coverage, EPRA will conduct regular reviews to ensure the network meets the needs of NL residents. EPRA will carry out depot mapping reviews periodically to ensure population density and distances from depots are adequate for proper coverage.

***3(i) ongoing consultations about the electronic stewardship program with persons who the brand owner believes the environmental stewardship program may affect, including members of the public, in accordance with the guidelines established by the board:***

As part of its approved program plans in NS and PEI, EPRA operates a Local Advisory Committee with selected members of the government, charitable, NGO and local business sectors to provide an important forum for "grassroots" program issues to be tabled and discussed. EPRA will expand this committee to include up to 2 representatives from NL to participate directly and provide insight to important local issues.

EPRA will also continue to gauge the general knowledge and awareness levels of NL residents regarding an industry-led program and we have engaged M5 Communications to conduct annual consumer research.

To date, Newfoundland and Labrador survey results conducted for EPRA in 2011 reveal the following;

1. 92% of Newfoundlanders and Labradorians expressed their support for the establishment of an electronics recycling program.
2. The majority of Newfoundlanders and Labradorians currently have electronics that do not work or are not being used.
3. 75% of Newfoundlanders and Labradorians would prefer any Environmental Handling Fee be identified separately from the price of the product.

A copy of this research report is attached as '**Appendix F**'.

In addition, over the past two years, EPRA has met with senior members of most provincial government departments to share best practices on its industry led electronics recycling programs in other provinces throughout the country, and to discuss opportunities to achieve similar success through a program launch in Newfoundland and Labrador. EPRA also conducted similar outreach with the following municipal governments and stakeholders in Newfoundland and Labrador:

Municipal Governments: Corner Brook; Conception Bay South; Grand Falls–Windsor; and St. John's.

Stakeholders: Central Waste Management; MUN Centre for Regional Policy and Development; Municipalities NL; NL Employers' Council; NL Environmental Industry Association; St. John's Board of Trade; Western Regional Waste Management and Eastern Waste Management Committee.

***3(j): a listing of all brand owners covered under a stewardship plan in the form prescribed by the board:***

Currently, EPRA has approximately 500 companies registered with our programs in Atlantic Canada, fulfilling their environmental compliance to recycling regulations in both NS and PEI. These firms represent the vast majority of companies selling obligated electronics in the region.

EPRA will canvas its current stewards to seek their support for plan submission in NL, and will conduct outreach to local retailers in NL who may not be obligated in other provinces to this point. By February 28th, EPRA will provide MMSB with a listing of obligated stewards who have chosen EPRA to fulfill their compliance to the NL regulation. '**Appendix G**' outlines the stewards presently registered with EPRA in NS and PEI – we anticipate the majority of these companies will join our program in Newfoundland and Labrador. A number of these stewards have proactively indicated their support in writing and are listed at the bottom of '**Appendix G**'.

**3(k) brand owner qualification standards and information demonstrating how electronic products and e-waste collected will be managed in a manner that employs environmental and human health and safety standards meeting or exceeding applicable federal, provincial and municipal regulations:**

EPRA requires that its contracted primary recyclers and each of their respective downstream processors be assessed against and verified to the EPSC Electronics Recycling Standard (Version 4 - 2010) in order to receive and process program materials. All audits will be conducted by an independent environmental auditing firm and in accordance with the EPRA Recycler Qualification Program. Assessment activities will be initiated and monitored by the Recycler Qualification Office established to manage all recycler assessments and approvals on behalf of the program. These activities include:

- Mapping the downstream flow of materials – materials generated from a primary recycler are grouped into three main categories: non-hazardous; scrap; and hazardous – they are sent to market; to sub-vendors for further processing or recovery; or to disposal vendors;
- Document audit – all downstream vendors must show, on paper, that they are compliant with the ERS, identifying any potential regulatory non-compliance issues, verifying commercial arrangements and material volumes handled;
- Onsite audit – all primary recyclers will be subject to this audit, as will be processors of materials considered scrap or hazardous. However, if some of the materials resulting from processing scrap or hazardous materials are considered non-hazardous, the downstream processor of those materials may not require an onsite audit; and
- Final assessment – includes: mapping of downstream flow of materials including a mass balance of materials (units received for processing vs. metric tonnes processed); results of document and onsite audits; and confirmation that the primary recycler and its sub-vendors will be compliant with the ERS.

The approval of a primary recycler and downstream vendors is, at minimum, valid for a period of three years, at which time a re-assessment is required. Approvals conducted using the RQP process may be recognized in multiple jurisdictions at the discretion of the governing provincial stewardship organization. Where a primary processor changes its processing technology and/or downstream processors, they will be subject to audit procedures to ensure any and all changes conform to the ERS.

Please note that the RQP and ERS may be revised from time to time as technological advancements are introduced to either the manufacturing or recycling processes for electronic products or to reflect regulatory and industry requirements.

The ERS and the related audit protocols ensure that EOLE and materials are processed in accordance to the provisions of the *Material Disposition Hierarchy, and Acceptable Processes and Points of Final Disposition* (see Table 1 on following page):

**Table 1: ERS Material Disposition Hierarchy, and Acceptable Processes and Points of Final Disposition**

		Disposition Hierarchy			Acceptable Processes and Points of Final Disposition							
		Material Recovery Required	Energy recovery Permitted	Other disposition Permitted	Manual dismantling and material separation	Mechanical material separation	Extraction/purification/refinement <sup>t</sup>	Smelting to reclaim metal	EFW Incineration (use of material as an energy substitute)	Landfill	Hazardous Waste Landfill	Export to a non-OECD/EU country for processing
Electronic Scrap	EOLE	★			✓	✓	✗	✗	✗	✗	✗	✗
	Components (hard drives, chips, etc)	★			✓	✓	✓	✓	✗	✗	✗	✗
	Wires / Cables	★			✓	✓	✓	✓	✗	✗	✗	✗
	Copper Yokes	★			✓	✓	✓	✓	✗	✗	✗	✗
	Circuit Boards	★			✓	✓	✓	✓	✗	✗	✗	✗
	Metal / plastic laminates	★			✓	✓	✓	✓	✗	✗	✗	✗
Non Hazardous	Metal	★							✗	✗	✗	✗
	Mixed Metals	★							✗	✗	✗	✗
	Metal dusts (bag house)	★							✗	✗	✗	✗
	Non-lead-ed Glass	★						✗	✗	✗	✗	✗
	Plastic		★	★				✗			✗	✓
	Mixed Plastics		★	★				✗			✗	✓
	Wood		★	★				✗			✗	✗
	Leather, cotton and other fibres		★	★				✗			✗	✗
Substances of Concern	Insulation (Fibreglass / composite)		★	★				✗			✗	✗
	Leaded Glass	★			✓	✓	✓	✓	✗	✗	✗	✗
	Washed lead-ed glass cullet	★			✗	✓	✓	✓	✗	✗	✗	✗
	Mercury Lamps	★			✗	✓	✓	✗	✗	✗	✗	✗
	Mercury	★			✗	✓	✓	✗	✗	✗	✗	✗
	Batteries	★			✗	✓	✓	✓	✗	✗	✗	✗
	Ink / Toner Cartridges		★		✓	✓	✓	✓	✓	✗	✗	✗
	Ink / Toner		★		✗	✓	✓	✗	✓	✗	✗	✗
	Phosphor Powder			★	✗	✓	✓	✗	✗	✗		✗
Ethylene Glycol			★	✗	✓	✓	✗	✗	✗		✗	
<p>In accordance with the Disposition Hierarchy material recovery is always preferential over other disposition methods for all materials but only required where indicated with an '★'.</p> <p>Where the use of the material for energy recovery, or other disposition methods is permitted, they are indicated with an '★'.</p>												
Process/application not permitted under the ERS											✗	
Process/application is permitted under the ERS and subject to on-site audit											✓	
Process/application is permitted under the ERS and subject to document review and verification												

***3(l): a description of how a brand owner will manage costs associated with the implementation and operation of an electronic stewardship plan:***

The program will be funded by an Environmental Handling Fee (EHF) that is levied on new electronic product sales designated in the Regulation. The EHF may be shown on the sales receipt of each new electronic product covered by the program.

The EHF will allow consumers and the ICI sector to drop-off EOL electronic products at designated drop-off sites free-of-charge with the assurance that these items will be responsibly recycled. The ICI sector will have the option of scheduling drop-offs for large quantities of e-waste.

The EHF for each product designated by regulation will reflect the true cost of managing that product. The EHF will fund:

- Collection, handling, consolidation, transportation and recycling;
- Communication and public awareness;
- Administration expenses;
- Environmental audit expenses related to approving new primary recyclers for the program or changes to existing primary or downstream processors or processing technologies which improve program efficiencies;
- Compliance and enforcement provisions required over and above government measures;
- Research and Development (R&D) initiatives to allow for continuous improvement of the program; and,
- A prudent operating contingency reserve.

EPRA is an industry-led non-for-profit organization where Obligated Stewards, registered with our Provincial Programs manage the financing of the program with Environmental Handling Fees (EHFs).

It is important to understand that EHF revenue does not go to the electronic industry or program members. All of the funding (100%) is used by EPRA to operate the program on a cost recovery basis solely for the program in NL. In addition, we use independent auditors to verify the EHFs collected and remitted by industry stewards to EPRA.

Rather than a single flat fee set across all electronics products designated by NL Regulation, the fee is set by product category and is subject to HST. EPRA was a founder and key participant in the development of a transparent environmental handling fee (EHF) methodology also employed by sister programs in Quebec, Manitoba, British Columbia and Saskatchewan. This initiative came from recommendations from InterGroup Consultants (Winnipeg, MB).

It is also important to note that EPRA will monitor revenue generated by the program to ensure that funds will be sufficient to fund all of the program activities identified above. The fund for

the NL program will be segregated from all other Provincial program funds in all respects and will be reported annually.

The fee Schedule will be published prior to launch and a regular fee review will be conducted. The following table is provided for illustrative purposes only. However, the established fee shall not exceed the EPRA NS and PEI rates by more than 20%. EPRA will work diligently with best available data to estimate the actual cost impacts of delivering a program across Newfoundland and Labrador.

<i>Regulated Product Categories</i>	<i>EPRA EHF for NS &amp; PEI (Jan. 2013)</i>
Desktop Computers	\$10.50
Portable Computers	\$2.10
Displays <= 29"	\$11.50
Displays > 29"	\$40.00
Desktop Printers, Scanners, Fax Machines, Copiers	\$6.50
Computer Peripherals	\$0.90
Non-Cellular Telephones and Answering Machines	\$0.85
Cellular Telephones	\$0.10 *
Personal/Portable Audio/Video Systems	\$0.40
Home Audio/Video Systems	\$3.50
Home Theatre in a Box Systems	\$6.00
Aftermarket Vehicle Audio & Video Systems	\$2.75

\* Presently cellphones are not collected under the NS & PEI Program. They are collected under the Quebec program and this is the recycling fee.

***3(m): where a brand owner charges a separate fee with respect to the costs of implementing and operating an electronic stewardship plan, a description of how that fee will be collected and used:***

Obligated brand owners registered under the EPRA plan will remit Environmental Handling Fees monthly to EPRA for their previous month's net sales (total sales less returns).

The EHF is applied to a regulated new product only once in the supply chain and is submitted to EPRA.

Obligated stewards may choose to pass this fee on to the end-user (e.g. consumer) as a visible fee or build it into the cost of the product.

Ownership of the program fund is retained by EPRA and will be managed by its team of financial experts.

To reduce the administrative burden on small business owners and companies, EPRA has initiated a policy change allowing stewards to remit on an annual or quarterly basis effective January 1, 2013.

Program development and implementation activities undertaken by EPRA in advance of EHF collection may be reimbursed from future program revenues, with reasonable interest, to EPRA and its contracted service providers. Examples include:

- EPRA activities to develop and manage implementation of a program plan, define the partner requirements, and negotiate contracts;

- All activities undertaken by the Program Administrator during program plan development and implementation; and
- Any direct contributions made by industry.

A procedure defining reasonable and allowable expenses, including an appropriate time period for payback and the formula for calculating interest would be approved by EPRA.

***3(n): the assessment of the performance of the brand owner's plan by an independent auditor:***

On an annual basis all program finances will be subject to independent audit by a CGA accredited firm. In addition, EPRA will develop specified procedures for ensuring the independent verification of key performance metrics related to collection, accessibility and awareness indicators (as per section 3(c) above).

***3(o): the elimination or reduction of the environmental impacts of electronic products and e-waste:***

A key component of the EPRA program is the pioneering and strict requirements, which our industry-led standards for recyclers, reuse/refurbishers and collection sites all must adhere to. These standards ensure very high level of compliance to both environmental and occupational health and safety standards, and are twinned with a comprehensive audit protocol.

While the reduction and reuse of electrical and electronic equipment falls outside the scope of the Program, the Program can commit to the following with respect to reduction and reuse of designated products:

- Reporting via EPSC, to the Province and stakeholders on “Design for Environment” and other industry initiatives to reduce the environmental impact of new designated electrical and electronic products within our membership.
- Providing communication to program users about reuse opportunities for designated electrical and electronic products administered by other programs and agencies.