



June 30, 2010

Via e-mail and mail

David Ranson,
Director, Environmental Quality
Environmental Protection Division,
Ministry of Environment
PO Box 9241
Stn Prov Govt
Victoria BC,
V8W 9M9

Dear Director Ranson:

As we discussed at our meeting of June 16th in your Victoria offices, I am writing to formally request an amendment to the Stewardship Plan for Electronics Stewardship Association of British Columbia (ESABC), as approved December 18, 2006, and further amended September 25, 2009 and April 15, 2010, to expand the program to include Phase II Materials commencing July 1, 2010.

As you will recall, in section 6.1 of the Stewardship Plan dated October 13, 2006, approved before the ESABC program became operational on August 1, 2007, ESABC identified multiple problems associated with developing meaningful performance measures for end-of-life electronics including:

- the lack of knowledge of consumer behaviors surrounding return patterns and product lifespan for obligated electronic products;
- the wide range in estimated product life-spans between product categories;
- the lack of relevance of average sales as a predictor of return volumes;
- the inability to estimate with any accuracy the size of the historic waste pile; and
- the complexities in the electronic supply chain which make the EHF an imperfect approximation of sales and distribution within BC.

In the plan ESABC also committed to undertake a world-wide study of the metrics used in EOL programs to determine those appropriate for this type of program and the ones best suited for B.C.

In a follow-up letter dated November 10, 2006 ESABC responded to a Ministry request for supplemental details, and committed to providing annual recovery rate information as defined by the regulation using the environmental fees collected to determine sales and an

approximation of units collected. In making this commitment ESABC reconfirmed that the electronics industry did not consider the recovery rate to be a valid measure of program effectiveness due to, among other things, the lengthy and varied operational life-spans of the obligated products and the rapid technological changes in the industry.

ESABC accompanied this commitment with further clarification that the ESABC research study would determine whether the recovery rate as defined in the regulation was an appropriate measure and if not, propose an alternative performance measurement system after two full years of operational information was available.

In the summer of 2009 Canada's four industry-led, regulated, not-for profit stewardship agencies (ACES, ESABC, OES and SWEEP) jointly commissioned Intergroup Consultants Ltd. to conduct pioneering research to analyze and make recommendations for a core suite of performance indicators specifically for those programs managing end-of-life electronic products. The primary purpose of the study was to allow each program to track its own performance over time; facilitate comparisons and benchmarking between jurisdictions and communicate performance accomplishments and targets to government and other stakeholders.

To assist in the selection of a core suite of performance indicators which accomplished these goals the following guiding principles were adopted. All possible performance indicators were reviewed to determine if they were:

- Representative of performance;
- Easily communicated to and understood by stakeholders;
- Based on data that is feasible for the program to collect, maintain and report with accuracy and ideally verified by third parties;
- Cost effective; and
- Comparable across programs

Section 4.5.4 of the Intergroup Study *Research and Recommendations for Performance Measures for Regulated, Industry-led, End-of-life Electronics Recycling Programs in Canada* reviews the capture rate metric, which is commonly used for short life span, non-durable goods such as beverage containers. For the purposes of this study various similar metrics including the recovery rate stipulated in the *BC Recycling Regulation* were grouped together under this heading.

In respect to electronics the study notes the wide variety in the methods used in the different programs studied to measure capture rates and identifies the serious analytical problems that arise when this metric is extended to durable goods such as electronics. The study looked at both models based on estimates of product sold compared to product collected as well as capture rates

based on estimates using a model and concluded that neither approach provides a credible estimate of the material available to be collected in a given period that can be independently confirmed or verified and that *“given these limitations, capture rate is not a meaningful performance measure for durable goods such as electronics products”*.

To date ESABC has submitted two Annual Reports to the Ministry the first for the partial year 2007, filed June 31, 2008 and the second for the full calendar year of 2008 filed June 31, 2009. ESABC appreciated the Ministry’s understanding with regard to the difficulties associated with meeting the commitment to report out on the recovery rate reflected in Manager Kris Ord’s letter of February 25, 2009. In 2009 ESABC adopted her suggestion that ESABC adopt an interim performance measure of absolute recovery per capita and reported out on this metric both in absolute terms and by regional district in the 2008 Annual Report. ESABC proposes to continue reporting on these metrics in 2009 along with the other core performance metrics identified in the Intergroup Study.

In your correspondence of March 11, 2010 you set out your expectation that ESABC would be propose an alternative performance measure for recovery rate for 2010 reporting along with a discussion of the outstanding commitment respecting recovery rate when we met with your staff in Toronto March 31, 2010. In both the meeting in Toronto and the follow-up meeting June 16, 2010 we discussed at length the operational and analytical problems associated with using the recovery rate as defined in the regulation as a performance metric for durable goods such as electronics.

ESABC proposes instead of the recovery rate to adopt as a performance measurement system, the comprehensive suite of recommended core performance metrics identified by the author’s of the Intergroup Study *Research and Recommendations for Performance Measures for Regulated, Industry-led, End-of-life Electronics Recycling Programs in Canada* as part of the study’s research on international approaches. The performance metrics fall into the following five categories:

- Operational Indicators;
- Accessibility Indicators;
- Awareness Indicators;
- Financial Indicators; and
- Environmental Impact Indicators.

Nine of these indicators in the first four categories are identified as being suitable for immediate implementation and ESABC intends to adopt and report on these nine metrics in the 2009 ESABC Annual Report which will be submitted to the Ministry on June 30, 2010 and annually thereafter.

- Total WEEE Collected (tonnes);
- Total WEEE Collected per capita (kilograms)
- Per cent of population covered by collection sites
- Total collection sites
- Total collection events
- Percentage of the population aware of the program
- Total program costs per tonne
- Operational costs per tonne
- Overhead costs per tonne

ESABC also commits to expanding the suite of core performance measures commencing with the Annual Report for the operating year 2012 to include:

- Total weight of material recycled as a percentage of material collected;
- Trends in processing; and
- Mass balancing.

With respect to the operational indicators which would replace the recovery rate ESABC also commits to annual reporting on total WEEE collected per capita (kilograms) by regional district.

In addition ESABC commits to commissioning a study to identify and examine practices for handling or disposing of regulated end-of-life electronics that is not collected by ESABC and thus “unaccountable” to ESABC by no later than the first quarter of 2011.

These meaningful performance measures which can be verified by third parties will also be incorporated into the next version of the ESABC Stewardship Plan which ESABC anticipates will be the subject of public consultation in the Spring of 2011.

To ensure that ESABC remains compliant with the requirements of the Stewardship Plan, for years past and future, ESABC requests that you recognize and approve the alternate performance measurement system proposed and relieve ESABC of the commitment to report recovery rate information as set out in the following passage from the November 10, 2006 addendum:

Recovery Rate

ESBC commits to providing annual recovery rate information annually as defined by the regulation. The calculation will be made using the environmental fees collected to determine sales and an approximation of units collected.



ESABC looks forward to continuing to work with you as our program plans for further expansion, while maintaining high environmental standards and providing comprehensive reporting on and verification of program metrics in a fully accountable and transparent manner.

Yours truly;

A handwritten signature in blue ink that reads 'Joyce Thayer'. The signature is fluid and cursive, with the first name 'Joyce' being larger and more prominent than the last name 'Thayer'.

Joyce Thayer
Executive Director ESABC

Cc: Kris Ord, Manager, Community Waste Management
David Lawes, Head, Industry Product Stewardship
Teresa Conner, Senior Policy Analyst
Meegan Armstrong, Senior Policy Analyst