

A Stewardship Plan for Refrigeration Units

Submitted to the Ministry of the Environment by the Canadian Beverage Association November 5 2012



Introduction

Under British Columbia's Recycling Regulation, beverage brand-owners are financially responsible for the recovery of refrigeration units that exhibit their branding or are owned outright by the beverage company. The following Plan addresses the key elements required by the British Columbia (BC) Ministry of Environment to form a Stewardship Plan:

- Product Management Goals
- Product Life Cycle Management
- Proposed Management System
- Program Performance Measurement (financial/cost management, environmental management)

Products covered by the following Plan:

This plan will cover refrigeration units and/or vending machines that exhibit the branding or are owned outright by a member company of the Canadian Beverage Association in British Columbia.

Program Costs:

No program costs will be passed on directly to consumers.

Baseline Data

A very high percentage of non-alcoholic beverage vending and refrigeration units in BC are owned and operated by four Canadian Beverage Association (CBA) member companies, namely Coca-Cola Canada Ltd., PepsiCo Beverages Canada Ltd., Red Bull Canada, and Cott Beverages Canada. An initial survey of these companies revealed that collectively, they operate 43,672 units in British Columbia (10,778 vending machines, 24,944 coolers and 7,950 fountain units).

Product Recovery Rate

The existing EOL (End of Life) management policies developed by CBA members have yielded an exceptionally high recovery rate for refrigeration units. A survey of Coca-Cola, Pepsi and Red Bull confirmed that of the units that have reached the end of their useful life (i.e. cannot be retrofitted or refurbished) 97% are recycled and 3% resold to a third party for continued use. Record keeping protocols have been instituted to track all units until the point of recycling or sale. It is the intention of CBA members to maintain high levels of recovery and recycling in the future. This will be reflected in the recovery rate target in the year following the program's Year 1 evaluation and consultation with the Ministry.

Product Life Cycle Management

Current Collection System

Existing EOL management policies practiced by CBA members includes record keeping protocols to track all units until the point of recycling or sale.



End-of-Life (EOL) Management

With respect to EOL management of refrigeration units, CBA members have indicated that they manage their own material by either recycling the units in a controlled manner or by reselling them. Prior to recycling, all coolants are drained from the units and disposed of responsibly.

Lifecycle Extension: Retrofits & Refurbishment

To extend its useful life, a CBA member's unit may undergo more than one retrofit or refurbishment throughout its lifecycle. Coca-Cola, for instance, estimates that 25% of its installed units have undergone at least one retrofit/refurbishment in their lifetime. Furthermore, CBA members are increasingly using units that depreciate much slower delaying the need for disposal. Further efforts to reduce their environmental impact include the recycling and reuse of old parts removed from units during the repair stage.

Technological Innovation

In line with the Ministry of Environment's intention that stewardship programs be results-based, CBA members already engage in efforts to reduce energy consumption and greenhouse gas emissions. Technological improvements in past years have made refrigeration units much more energy efficient. As a result, energy consumption is decreasing as equipment that has reached its useful life is replaced with new, more energy-efficient units.

Program Performance Measurement

The CBA will monitor and report on how vending and refrigeration units are managed at their end-of-life by obligated CBA members.

Recovery Rate Target

In accordance with British Columbia's Recycling Regulation, Part 2, Section 5 (1a) the target recovery rate for the first year of the stewardship plan will be set at **75%.** During Year 1 an evaluation will be completed to determine future recovery rate targets including the program's recovery rate target for Year 2 and future targets. This evaluation will ensure an established industry-wide recovery process and record keeping protocols are fully implemented in order to achieve the highest possible recovery rates. It is our intent to increase the recovery target rates in Year 2 & 3 of the program after the Year 1 evaluation and consultation with the Ministry.

Program Administration

Members will report to CBA annually on the following:

- Number of Units: Number of vending and refrigeration units installed, added and removed from the Province of BC in the reporting period.
- Documented Policies and Procedures: List of company polices/procedures pertaining to the EOL management of vending and refrigeration units (including asset tracking protocols).
- Continuous Improvement Efforts: including but not limited to improvements in the EOL management of obligated material.



Program Performance

Members will report to CBA annually on the following:

- Number of units retrofitted/refurbished in the reporting period.
- Number of units that have reached their EOL that were sent to recycling.
- Improvements made with respect to diversion and recycling as they relate to vending and refrigeration units during the reporting period.

Procedure for Third Party Units

A small percentage of units that have reached their EOL are sold to a third party or may have reached a third party in the past:

- If sold to a third party, the procedure outlining proper disposal will include:
 - A notification on refrigeration units to direct the third party to contact the CBA for instructions on where the unit can be properly disposed of at its end-of-life.
 - In addition, a clause will be added to future purchase agreement instructing the purchaser of the obligation to properly dispose of unit at its end-of-life.
- If CBA is contacted by a third party in possession of a refrigeration unit previously owned by a CBA member CBA will inform that person of the options to properly dispose of the unit.

Annual Report

The CBA will compile an annual report to be submitted to the Ministry of Environment that includes the following:

- 1. Program Highlights
- 2. Performance Data
 - a. Recovery
 - b. Post-Collection Management
- 3. Continuous Improvement

Enforcement Mechanisms

• Protocols will be shared at the Ministry's request.

Dispute Resolution

The program will enter into contracts agreement with suppliers or service providers as required. Any disputes arising from contracts would be resolved using normal commercial legal procedures.

Stakeholder Consultation

CBA has complied with the British Columbia's Ministry of Environment requirement to incorporate a public consultation process prior to the formal submission of the stewardship plan. The stakeholder consultation process comprised of an easily accessible online link posted to the CBA website page titled,



"CBA's BC Stewardship Plan for Refrigeration Units Stakeholder Consultation," directing the public to call/email the CBA directly with any questions or comments.

In addition, CBA worked with the Recycling Council of British Columbia (RCBC) to post a link on their website directing the public to the CBA public consultation page on Tuesday, September 4th, the first day of the consultation period. The stakeholder consultation page on the CBA website was active from Tuesday, September 4th, 2012 to September 18th, 2012 (two weeks), which ensured an adequate time for the public to provide input. CBA is confident that this process ensured proper and easily accessible access for British Columbians to provide feedback and input on the stewardship plan. After the consultation period of two weeks was concluded, a summary of our stakeholder consultations was included in the appendix of this document under the title, 'Stakeholder Consultation Summary.'



Appendix

Stakeholder Consultation Summary:

As noted in the Stakeholder Consultation section of the Canadian Beverage Association's Refrigeration Unit Stewardship Plan, CBA had an easily accessible online link posted to the CBA website page titled "CBA's BC Stewardship Plan for Refrigeration Units Stakeholder Consultation," which directed the public to call/email the CBA directly with any questions or comments.

In order to increase public awareness of the stewardship plan, CBA also directed RCBC (Recycling Council of British Columbia) to post a link on their website directing stakeholders to the CBA's website for consultation.

During the 'two week consultation period' from Tuesday, September 4th, 2012 to September 18th, 2012, CBA received one email from a stakeholder, Mr. Buddy Boyd of Gibsons recycling (Gibsons, BC) on September 6th. In addition, CBA received an email outside of the stakeholder consultation period on October 2nd, 2012 from Brooke Carere, an *Environmental & Utilities Services Technician* with the Squamish-Lilloet Regional District.

As of November 5th, 2012 the public consultation page on the CBA website remained online to continue to allow the public to view the proposed stewardship plan.

Stakeholder Consultation#1:

Mr. Boyd of Gibson's Recycling-Gibsons, British Columbia: (via email)

Mr. Buddy Boyd expressed concern with the cost of recycling vending machine & refrigeration units in his community due to it remoteness and reliance on ferry access.

CBA responded to Mr. Boyd's email with the following response:

Thank you for the inquiry and comments regarding the Canadian Beverage Association Plan for Non Alcoholic Vending and Refrigeration units in BC.

We recognize that no program can address all situations in exactly the same way; this is true for most stewardship programs across the country. However, in the case of refrigeration and vending machine units the brand owners manage most of their own vending machines.

Regarding units sold to a third party, only a very small percentage is sold to third parties once a brand owner no longer requires the units.

Furthermore, the program does not prevent any scrap dealer or landfill from charging a fee to accept any product or material. In the case of beverage companies, who manage almost all of their own end-of-life

refrigeration units themselves, when they dispose of these vending machines or coolers they are willing to pay a fee to have these recycled properly.

Stakeholder Consultation#2:

Ms. Carere, Environmental & Utilities Services Technician with Squamish-Lilloet Regional District: (via email)

Ms. Brooke Carere's email asked for some more detail on the stewardship plan, the recycling process for vending machines and the process for handling third party units at their end of life.

CBA responded to Ms. Carere's email with the following response:

In British Columbia, end-of-life management services for refrigerated vending machines are provided primarily by private recycling companies and scrap metal dealers across the province. While public landfills and transfer stations do accept refrigerated appliances, those recycling services are typically only provided to residents (as opposed to commercial entities). To recycle the vending machines, first the Freon is drained by a trained technician from the units and properly handled at a licensed facility. The units are then baled and sent to another facility or the units are processed on-site. In terms of processing, the units are dismantled, shredded and the metal is then baled and sold to a buyer in North America or overseas. With respect to cost, because the unit is primarily composed of metal, the unit does have value; however, the cost of Freon removal negates that value so there is typically no payout for refrigerated vending machine recycling.

To guarantee that units still in their possession do not go to landfill, CBA members have asset tracking policies to track their units until they are disposed of.

Regarding units sold to a third party, those units are still operational at the time of sale and therefore, are not in need of end-of-life management services. In that scenario, the third party then bears responsibility for what happens to the unit once it is no longer in use. To encourage proper recycling, CBA members are willing as part of the Plan to affix a sticker on the back of new units providing instructions on how to handle the unit at end-of-life.