

# **BC Refrigeration Units Stewardship Plan**

## **Annual Report to the Director**

## 2015

Submitted to: Director, Extended Producer Responsibility Programs

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June 29<sup>th</sup>, 2016

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# **Executive Summary**

| Products within plan | Vending Machines, Refrigeration Coolers, Beverage Dispensing Systems operated for commercial purposes only by Canadian Beverage Association (CBA) members. |
|----------------------|--|
| Program website      | http://www.canadianbeverage.ca/environment/stewardship/  |

| Recycling Regulation<br>Reference | Торіс   | Summary  |
|-----------------------------------|---|--|
| Part 2, section 8(2)(a)           | Public Education Materials and Strategies                             | <ul> <li>Stewardship plan and annual reports continue to be posted on CBA's website</li> <li>CBA to continue to provide any third party instructions on where refrigeration units can be properly disposed for end-of-life management</li> </ul>   |
| Part 2, section 8(2)(b)           | Collection System and Facilities                                      | <ul> <li>No change in collection system and facilities from 2014</li> <li>Refrigeration units continue to be collected by CBA members at three locations.</li> <li>Once collected units destined for end-of-life management are transported to one of four processing facilities in British Columbia.</li> <li>Minor change in 2015 for processing facilities; one steward selected a new processing facility in British Columbia for 2015, Scott Road Trading Limited.</li> <li>An additional processing facility exists in Ontario, only one refrigeration unit was processed there for end-of-life management.</li> </ul> |
| Part 2, section 8(2)(c)           | Product Environmental Impact Reduction, Reusability and Recyclability | <ul> <li>CBA members continue to retrofit or refurbish refrigeration unit throughout its lifecycle, to extend its useful life in-trade.</li> <li>Further efforts undertaken to reduce environmental impact include the recycling and reuse of old parts removed from units during refurbishment/repairs.</li> </ul>  |
| Part 2, section 8(2)(d)           | Pollution Prevention Hierarchy and Product / Component Management     | <ul> <li>100% of refrigeration units which are collected are either refurbished/re-used or sent for recycling to metal processor in British Columbia (See table 4 &amp; 5)</li> <li>Approximately 82% of the components in each beverage vending machine are recycled (See table 5)</li> <li>Approximately 84% of the components in each beverage cooler are recycled (See table 5)</li> <li>Approximately 75% of the components in each beverage dispensing unit are recycled (See table 5)</li> </ul>  |
| Part 2, section 8(2)(e)           | Product Sold and<br>Collected and<br>Recovery Rate                    | <ul> <li>7,702 refrigeration units were introduced into trade in 2015 (See table 6)</li> <li>6,923 refrigeration units were collected for end-of-life management, collected for refurbishment and sold third parties (See table 7)</li> <li>Collection rate for 2015 was 94.01% (See table 7)</li> </ul>   |

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| Recycling Regulation<br>Reference                            |  | Topic            | Summary  |  |  |
|--|--|------------------|--|--|--|
| Part 2, section 8(2)(e.1)                                    |  |                  | <ul> <li>All products collected in British Columbia (6,922) are<br/>collected in three locations in the Greater Vancouver<br/>Regional District</li> </ul> |  |  |
|  | Comparison of Key Performance Targets                                |                  |  |  |  |
|  | Part 2 section 8(2)(g); See full list of targets in Plan Performance |                  |  |  |  |
| Priority Stewardship P Targets (as agreed with ministry file |  | Pe               | erformance Strategies for Improvement  |  |  |
| Annual Collection Target: Collection Rate: 80%               |  | Collection Rate: | : 94.01% (N/A exceeded target)   |  |  |

## **Program Outline**

The Canadian Beverage Association (CBA)<sup>1</sup> is the national industry association representing the broad spectrum of brands and companies that manufacture and distribute the majority of non-alcoholic liquid refreshment beverages consumed in Canada.

In 2012, CBA submitted a Stewardship Plan in accordance with Part V of British Columbia's (BC) Recycling Regulation, for beverage refrigeration units, including coolers, vending machines and beverage dispensing systems, which exhibit their branding or are owned outright by a participating CBA member beverage company. This report is the third annual report of the Stewardship Plan (hereafter "the plan") and includes our program performance and collection rates for the year of 2015.

The four members participating in the stewardship plan, include:

- Coca-Cola Refreshments Canada
- PepsiCo Beverages Canada
- > Red Bull Canada
- Cott Beverages Canada

All beverage refrigeration units covered under this Stewardship Plan are used for commercial purposes and are managed by internal process by CBA member companies and/or their distributors throughout the units' lifecycle. The products covered under Stewardship Plan include the following CBA member owned and branded refrigeration units:

Table 1: Products covered under Stewardship Plan

| Product Type                       | Further Description   |
|------------------------------------|---|
| Beverage Coolers                   | Countertop, 1 door units, 2 door units, 3 door units              |
| Beverage Vending Machines          | 72" and 79" high machines that distribute cans and/or PET bottles |
| <b>Beverage Dispensing Systems</b> | Bar guns, Counter units, Drop-in units, Combo units               |

<sup>&</sup>lt;sup>1</sup> www.canadianbeverage.ca

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## **General Disclosure:**

Due to system limitations and operational disruptions during the year, we disclose that there were some deficiencies in the data and supporting documentation available during the verification process.

The number of units in trade for the start of Q1 2015 has been revised from the 2014 Annual Report based upon updated information for two members.

Two members did not have all the supporting documentation available during the completeness verification process which led to the reliance on self-reported data for identifying the net change in 2015. These are reported as 'other adjustments'.

One member included data from January 15, 2015 to January 19, 2016 due to data management issues in obtaining the relevant reports on January 1, 2015 and December 31, 2015 respectively. In addition, the data for one member was entirely self-reported.

CBA continues to work with *PricewaterhouseCoopers LLP* to refine the program's data collection and management processes for future reports.

## **Public Education Materials and Strategies**

The Stewardship Plan only includes commercial products managed and processed internally by CBA members and distributors. To ensure public awareness of our industry's efforts to properly manage our refrigeration units, CBA will continue to post our Stewardship Plan and the plan's annual reports on our website. The link to the website is the following:

http://www.canadianbeverage.ca/environment/stewardship/.

CBA will continue to place a notification sticker on all refrigeration units if sold to a third party 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.

## Collection System and Facilities

There has been no change in the collection system or number of facilities used from the 2014 Annual Report.

CBA members continue to operate a closed collection network and any maintenance or refurbishments (parts replacements etc.) are undertaken by the beverage company or its local distributor. Therefore, when a unit requires retrofitting or refurbishment it is collected and transported by the member or distributor to their facility for further triage and maintenance.

Units are collected for end-of-life (EOL) management and refurbishment at four collection locations depending on the steward of the unit. Three collection locations are located in Greater Vancouver Regional District. Two of these locations are CBA member's own facilities, with the third location being the facility of a distributor who manages units on behalf of the steward. The fourth location is located in Brampton, Ontario, however in 2015 only one unit underwent end-of-life management at this location.

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When it has been determined that a piece of refrigeration equipment can no longer be used by the CBA member, a decision is made to remove the equipment as an asset from the company's list of assets and to have the machine recycled and processed by a contracted BC third party (referred to as a processor).

Five processing facilities are used by stewards for EOL management and four of these facilities are located in the Greater Vancouver Regional District with the exception of one location which is located in Brampton, Ontario. Processing facilities in British Columbia include the following locations:

Larcan Industry Limited 9710-187th Street, United#202 Surrey, BC V4N 3N6

Pacific Metals Recycling International 8360 Ontario Street, Vancouver, BC V5X 3E5 ABC Recycling 8081 Meadow Avenue Burnaby, BC V3N 2V9

Scott Road Trading Limited 12855 King George Hwy Surrey, BC, V3T 2T1

## Product Environmental Impact Reduction, Reusability and Recyclability

Most CBA members' refrigeration units undergo more than one retrofit or refurbishment throughout its lifecycle, to extend its useful life in-trade. Furthermore, CBA members increasingly use units that depreciate much slower, delaying the need for disposal. Further efforts undertaken to reduce environmental impact include the recycling and reuse of old parts removed from units during refurbishment/repairs.

An area of continuous improvement relates to the manufacturers and beverage companies as a whole. Efforts in the industry to increase the useful life of all refrigeration equipment through enhanced durability and modular systems that can be more easily replaced and repaired will reduce the number of units managed for EOL over time.

## Pollution Prevention Hierarchy and Product / Component Management

Beverage coolers, beverage vending machines and beverage dispensing system units are owned by beverage companies and placed in commercial facilities for use. Therefore, CBA members are individually responsible for the maintenance and end-of-life management. All CBA members in the stewardship plan have internal processes which ensure the collected product is managed appropriately as per the pollution prevention hierarchy.

Generally, if a unit breaks down in use the machine will either be repaired on-site, or removed to a member's off-site triage facility to be repaired. When the equipment is removed, it is replaced with either a used machine or a new machine.

The average lifespan of these types of machines tends to be extensive, although maintenance and servicing is required to ensure longevity and developments in technology have increased the lifespan of machines. The table on the next page shows the average lifespan of the different types of refrigeration equipment.

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| Table 2: Average lifes | pan of different types | s of refrigeration $\epsilon$ | equipment |
|------------------------|------------------------|-------------------------------|-----------|
|                        |                        |                               |           |

| Product Type                          | Average Product Lifespan |
|---------------------------------------|--------------------------|
| Beverage Coolers – Small (countertop) | 3-6 years                |
| Beverage Coolers - Larger             | 13 -15 years             |
| Beverage Vending Machines             | 9 - 12 years             |
| Beverage Dispensing Systems           | 7 – 9 years              |

Members operate a closed collection network and any maintenance or refurbishments (parts replacements etc.) are undertaken by the beverage company or its local distributor. Therefore, when a unit requires retrofitting or refurbishment it is collected and transported by the member or distributor to their facility for further triage and maintenance.

When it has been determined that a piece of refrigeration equipment can no longer be used by the company, a decision is made to remove the equipment as an asset from the company's list of assets and to have the machine recycled and processed by a contracted BC third party processor.

Once the units are ready for EOL management, they are shipped to intermediary local scrap metal processors for preparation of the metal refrigeration units for downstream recyclers. Prior to baling the equipment, the intermediary processors ensure all coolants and fluids and fluorescent bulbs are removed.

The intermediary processors based within BC then sell the baled metal to downstream metal processors where the equipment is shredded to recover the various ferrous and non-ferrous metals. These final processors are based in BC or in the United States (typically Northwest for transportation purposes). There are a number of major processor on the West Coast such as Schnitzer Steel and Sims Metal (formerly Richmond Steel), Metro Metals and Seattle Iron and Metal.

After the bales of mixed metal are shredded, ferrous metals are recovered from the stream through magnetic separation. This accounts for approximately 70 per cent of the inbound material. Then the remainder of the shredded material goes to a non-ferrous recovery plant where a number of separation technologies are used such as eddy-current systems, optical sorters and air separators, to recover these non-ferrous metals.<sup>2</sup> The shredded non-ferrous metal recovered accounts for approximately 5 per cent of the material. From the shredded non-ferrous metal recovered two main mixes are created:

- A shredded non-ferrous mixture of metals which mainly consists of aluminum;
- A shredded non-ferrous mixture of metals which is rich in stainless steel.

The remaining estimated 25 per cent of the material from the shredded equipment cannot be recovered and is commonly referred to as shredder fluff. The shredder fluff includes primarily non-recoverable mixed materials such as plastic (e.g. interior liners, plastic parts, etc.), insulation (e.g. foam insulation wire insulation, etc.), rubber products (e.g. seals, gaskets) and glass (e.g. glass doors, shelving). This shredded material also consists of approximately 1 per cent of non-recoverable ferrous and non-ferrous metals such as strips of copper or aluminum that are wrapped around parts of the equipment or metals imbedded in the insulation or plastic materials. This material cannot be recovered and is therefore landfilled.

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<sup>&</sup>lt;sup>2</sup> http://www.metalpass.com/metaldoc/paper.aspx?docID=90

## **Table 3: Acceptable Product End Fate Matrix**

If possible units are retrofitted or refurbished; if reuse is not possible the unit is destined for end of life management. This table only considers units sent for EOL management.

| Unit                              | Reused | Recycle        | Energy<br>Recovery | Land Fill |
|-----------------------------------|--------|----------------|--------------------|-----------|
| Vending<br>Machines               | N/A    | 1st Preference | N/A                | Х         |
| Cooler Units                      | N/A    | 1st Preference | N/A                | Х         |
| Beverage<br>Dispensing<br>Systems | N/A    | 1st Preference | N/A                | х         |

Table 4: Estimated Product End Fate Data for year ended December 31, 2015<sup>3</sup>

| Unit                              | Reused | Recycle | Energy<br>Recovery | Land Fill | Unknown |
|-----------------------------------|--------|---------|--------------------|-----------|---------|
| Vending<br>Machines               | 0%     | 82%     | 0%                 | 18%       | N/A     |
| Cooler Units                      | 0%     | 84%     | 0%                 | 16%       | N/A     |
| Beverage<br>Dispensing<br>Systems | 0%     | 75%     | 0%                 | 25%       | N/A     |

### **Table 5: Processing Pathways for EOL Management**

The table below demonstrates the general nature of the processing pathway which occurs once a unit can no longer be used by the CBA member company (i.e. can't be refurbished/re-used) and is sent to a third party processor for recycling and processing. The first phase of processing consists of the unit being sent to intermediary processor in British Columbia, where the unit is baled and sold to a downstream processor located in province or elsewhere in North America. At the second phase of processing the bale is shredded to separate recyclable mixed metal components from non-recyclable mixed materials. Depending on the unit type, at least 75% of the unit's components are recycled while the remaining 16-25% of components are sent for landfill disposal.<sup>4</sup>

See "Pollution Prevention Hierarchy and Product / Component Management" section above for a full overview of the processing pathways.

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<sup>&</sup>lt;sup>3</sup> Units sent for EOL Management

<sup>&</sup>lt;sup>4</sup> The basis of evidence for product treatment is derived from the Baseline Study Report submitted to the British Columbia Ministry of Environment in 2013 and prepared by the sustainability consultancy firm, ReclayStewardEdge.

| Unit                      | Nature of Processing      |   |
|---------------------------|---------------------------|---|
|                           | Phase#1 - Transfer to     | Phase#2 - Transfer to direct processor in British |
|                           | Intermediary Processor in | Columbia or elsewhere in North America            |
|                           | British Columbia          |   |
| <b>Vending Machines</b>   | 100% of unit components   | ~82% of unit components recycled (mixed metal)    |
| <b>Cooler Units</b>       | 100% of unit components   | ~84% of unit components recycled (mixed metal)    |
| Beverage                  | 100% of unit components   | ~75% of units components recycled (mixed          |
| <b>Dispensing Systems</b> |                           | metal)  |

## Product Sold and Collected and Recovery Rate

The tables and information below show highlights of the Stewardship Plan for the year of 2015.

In 2015, the total number of products collected was 6,923. The total number of units introduced and distributed into the province was 7,702, based on self-reporting by CBA members.

Table 6 shows the total number of refrigeration units at the start of Quarter 1 2015 compared to the end of Quarter 4 2015 in-trade. The change in the number of units from Quarter 1 and Quarter 4 is due to the following: the number of new units installed in-trade; the number of refurbished/ retrofitted units installed in-trade; the number of units removed from in-trade for retrofitting/ refurbishment; the number of units removed from in-trade for end-of-life management; the number of units lost in-trade; the number of units sold to third parties, and other adjustments.

Table 6: Number of units' in-trade at start of Q1 2015 and at the end of Q4 2015

|                                  | Number in-<br>trade: start of<br>Q1 2015⁵ | Introduced<br>into trade:<br>Q1-Q4 2015 <sup>6</sup> | Removed from trade: Q1-Q4 2015 <sup>7</sup> | Number in-<br>trade: end of<br>Q4 2015 | Net Change:<br>2015 Year<br>End <sup>8</sup> |
|----------------------------------|---|--|---|--|--|
| Beverage<br>Vending<br>Machines  | 9,255                                     | 817  | -1,510                                      | 8,562                                  | -693   |
| Beverage<br>Coolers              | 26,121                                    | 5,109  | -4155                                       | 27,075                                 | 954  |
| Beverage<br>Dispenser<br>Systems | 7,396                                     | 1,776  | -1,699                                      | 7,473                                  | 77   |
| Total                            | 42,772                                    | 7,702  | -7,364                                      | 43,110                                 | 338  |

<sup>&</sup>lt;sup>5</sup> The number of units in-trade for the start of Q1 2015 has been revised from the 2014 Annual Report based upon updated information.

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<sup>&</sup>lt;sup>6</sup> Includes both new and refurbished units as well as other adjustments with a net in-trade position.

<sup>&</sup>lt;sup>7</sup> Includes units sold to third parties, collected for refurbishment, collected for EOL management or lost in trade and other adjustments with a net removed from trade position.

<sup>&</sup>lt;sup>8</sup> Net change equals Q1 number in-trade plus, new in trade plus other adjustments with a net in-trade position, less units lost in trade, units sold to 3<sup>rd</sup> party, units collected for EOL management, units in refurbishment/retrofitting, and less other adjustments with a net removed from trade position.

The Recycling Regulation defines the recovery rate as the amount of product collected divided by the amount of product generated. We have described a recovery rate in our stewardship plan. However, the nature of our products as long life assets and therefore the indirect correlation between products distributed into the province and collected in the year, results in the recovery rate not being applicable.

As a more appropriate performance measure, we have disclosed a collection rate, in table 7 below, which shows the collection rate of units in 2015.

Due to the closed loop nature of stewards' refrigeration and vending operations and the high monetary value of refrigeration units, they are directly managed and tracked throughout their lifecycle until they are sent to processors for end of life management. A small number of units annually are sold to retailers/customers for continued use and exit the plan's tracking system. A number of units are also transferred out of province. However, stewards' inform and educate retailers/customers where vending/refrigeration units can be properly managed at the end of their lifecycle. It is only when units are lost-in-trade (i.e. stolen or misplaced by customer/retailer) that they may not be properly managed (i.e. collected) at the end of their lifecycle. Therefore, the plan's collection rate is calculated by the following:

**Units Collected** (Units sold to 3<sup>rd</sup> parties, units collected for refurbishment and sent for EOL management)

*Units Removed from Tracking System:* (Nominator plus # of units lost in trade and other adjustments with a net removed from trade position)

Table 7: Collection Rate for the Year of 2015

|                                  | # of Units<br>Collected for<br>EOL<br>management | # of<br>Units<br>Sold<br>to 3 <sup>rd</sup><br>Party | # of Units<br>Collected<br>for<br>Refurbish<br>ment | # of Units<br>Collected | # of<br>Units<br>Lost in<br>Trade<br>(2015) | Other<br>Adjustments | Units<br>Removed<br>from<br>Tracking<br>System | Collection<br>Rate (%) |
|----------------------------------|--|--|---|-------------------------|---|----------------------|--|------------------------|
| Beverage<br>Vending<br>Machines  | 1,013  | 0  | 494   | 1,507                   | 3   | 0                    | 1,510  | 99.80%                 |
| Beverage<br>Coolers              | 702  | 129  | 3,220   | 4,051                   | 11  | 93                   | 4,155  | 97.50%                 |
| Beverage<br>Dispenser<br>Systems | 892  | 5  | 468   | 1,365                   | 62  | 272                  | 1,699  | 80.34%                 |
| Total                            | 2,607  | 134  | 4,182   | 6,923                   | 76  | 365                  | 7,364  | 94.01%                 |

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**Table 8: Geographic Breakdown of Units Collected Based on Location of Collection Facilities** 

|  | Beverage<br>Vending<br>Machines | Beverage<br>Coolers | Beverage<br>Dispenser<br>Systems | Total |
|--|---------------------------------|---------------------|----------------------------------|-------|
| Greater<br>Vancouver<br>Regional<br>District | 1,506                           | 4,051               | 1,365                            | 6,922 |
| Other BC<br>Regional<br>Districts            | N/A                             | N/A                 | N/A                              | N/A   |
| Other<br>(Out-of-<br>Province)               | 1                               | 0                   | 0                                | 1     |

## Plan Performance

Summary of Program Performance Measures:

| Measures     | Targets/Goal  |                  |             |             |                      |              |
|--------------|---|------------------|-------------|-------------|----------------------|--------------|
|              | 2012  | 2013             | 2014        | 2015        | 2016                 | 2017         |
| Collection   | 75% target  | Collection       | Collection  | Collection  | Collection Target is | Collection   |
|              | committed   | Target is        | Target is   | Target is   | 80%                  | Target is    |
|              | to in plan.   | 80%              | 80%         | 80%         |                      | 80%          |
|              |   |                  |             |             |                      |              |
|              | Gather  | Collection       | Collection  | Collection  |                      |              |
|              | baseline  | <b>Rate:</b> 81% | Rate:       | Rate:       |                      |              |
|              | collection  |                  | 95.39%      | 94.01%      |                      |              |
|              | data to   |                  |             |             |                      |              |
|              | confirm   |                  |             |             |                      |              |
|              | future year   |                  |             |             |                      |              |
|              | recovery  |                  |             |             |                      |              |
|              | rates.  |                  |             |             |                      |              |
| Collection   | No specific target was committed for 2015. CBA members to continue to maintain complete             |                  |             |             |                      |              |
| System       | reverse logistics for products retained which remain in operation or "in-trade" until end of life.  |                  |             |             |                      |              |
|              | For products sold to third parties for continued use (~2% of products available at end of life) CBA |                  |             |             |                      |              |
|              | commits to educate and provide collection options.  |                  |             |             |                      |              |
|              |   |                  |             |             |                      |              |
| Consumer     | No specific target was committed for 2015 CBA members to maintain current processes. Given          |                  |             |             |                      |              |
| Awareness    | product longevity and specificity of market CBA commits to continue to make third parties           |                  |             |             |                      |              |
|              | aware of stewardship program through notification on product itself and details included in         |                  |             |             |                      |              |
|              | purchase agreements.  |                  |             |             |                      |              |
| Product Life | Depends   | No specific      | No specific | No specific | Depends on           | Depends on   |
| Cycle        | on product  | target was       | target was  | target was  | product type         | product type |
|              | type (see   | committed        | committed   | committed   | Depends on           | Depends on   |
|              | Pollution   | for 2013.        | for 2014.   | for 2015.   | product type (see    | product type |

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|            | Prevention  | Depends on   | Depends on   | Depends on   | Pollution           | (see         |
|------------|-------------|--------------|--------------|--------------|---------------------|--------------|
|            | Hierarchy   | product type | product type | product      | Prevention          | Pollution    |
|            | and         | (see         | (see         | type (see    | Hierarchy and       | Prevention   |
|            | Product /   | Pollution    | Pollution    | Pollution    | Product /           | Hierarchy    |
|            | Componen    | Prevention   | Prevention   | Prevention   | Component           | and Product  |
|            | t           | Hierarchy    | Hierarchy    | Hierarchy    | Management          | / Component  |
|            | Managem     | and Product  | and Product  | and Product  | Section above)      | Managemen    |
|            | ent Section | / Component  | / Component  | /            |                     | t Section    |
|            | above)      | Managemen    | Managemen    | Component    |                     | above)       |
|            |             | t Section    | t Section    | Manageme     |                     |              |
|            |             | above)       | above)       | nt Section   |                     |              |
|            |             |              |              | above)       |                     |              |
| Pollution  | Target all  | No specific  | No specific  | No specific  | Target all products | Target all   |
| Prevention | products    | target was   | target was   | target was   | for collection and  | products for |
| Hierarchy  | for         | committed    | committed    | committed    | management          | collection   |
|            | collection  | for 2013.    | for 2014.    | for 2015.    | according to the    | and          |
|            | and         | Target all   | Target all   | Target all   | PPH.                | managemen    |
|            | manageme    | products for | products for | products for |                     | t according  |
|            | nt          | collection   | collection   | collection   |                     | to the PPH.  |
|            | according   | and          | and          | and          |                     |              |
|            | to the PPH. | managemen    | managemen    | managemen    |                     |              |
|            |             | t according  | t according  | t according  |                     |              |
|            |             | to the PPH.  | to the PPH.  | to the PPH.  |                     |              |

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## **APPENDIX A:**

Third Party Assurance Statement for Non-Financial Information

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June 29, 2016

### **Independent Reasonable Assurance Report**

To the Directors of the Canadian Beverage Association on selected non-financial information included in the Canadian Beverage Association 2015 Annual Report

We have been engaged by the Canadian Beverage Association ("CBA") to perform a reasonable assurance engagement in respect of the following information (the "Selected Information") detailed in Appendix A, and also included within CBA's Annual Report to the Director, Environmental Standards Branch, Ministry of the Environment ("MOE") for the year ended December 31, 2015:

- 1. The location of collection facilities, and any changes in the number and location of collection facilities from the previous report in accordance with Section 8(2)(b) of the British Columbia Regulation 449/2004 Recycling Regulation ("Recycling Regulation");
- 2. The description of how recovered product was managed in accordance with the pollution prevention hierarchy in accordance with 8(2)(d) of the Recycling Regulation;
- 3. The description of the total amounts of the producer's product collected for the year ended December 31, 2015 in accordance with 8(2)(e) of the Recycling Regulation; and
- 4. The performance for the year in relation to targets in the approved stewardship plan under Sections 8(2)(b), (d), and (e) in accordance with Section 8(2)(g) of the Recycling Regulation.

## Responsibilities

### PricewaterhouseCoopers LLP

Our responsibility is to carry out an independent reasonable assurance engagement and to express an opinion on the Selected Information based on the procedures we have performed and the evidence we have obtained. We conducted our reasonable assurance engagement in accordance with the International Standard on Assurance Engagements 3000 Revised (ISAE 3000 (Revised)), Assurance Engagements other than Audits or Reviews of Historical Financial Information, published by the International Federation of Accountants, and the Guide to Third Party Assurance for Non-Financial Information in Annual Reports – 2015 Reporting Year, dated February, 2016 ("Assurance Requirements"), published by the MOE.

We apply International Standard on Quality Control 1 and accordingly maintain a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

In conducting our engagement, we have complied with the independence and other ethical requirements of the Code of Ethics for Professional Accountants issued by the International Ethics Standards Board for Accountants.



#### **CBA**

CBA is responsible for the preparation and fair presentation of the Selected Information in accordance with the evaluation criteria as listed in Appendix A. Management and the members are responsible for such internal control as management determines is necessary to enable the preparation of the Selected Information such that it is free from material misstatement. Furthermore management is responsible for preparation of suitable evaluation criteria in accordance with the Assurance Requirements as specified by the Director under section 8(2)(h) of the Recycling Regulation.

Management and the members are responsible for providing us with information about any frauds (including alleged and/or suspected instances of fraud) or illegal (or possibly illegal) acts communicated by employees, former employees, or contractors and all related known facts known by management and the members that may relate to the Selected Information. CBA is also responsible for demonstrating adherence to the Recycling Regulation as outlined within Section 1 of the Annual Report to the Director.

### **Methodology and Assurance Procedures**

We conducted our reasonable assurance engagement in accordance with ISAE 3000 (Revised). This standard requires that we comply with independence requirements and plan and perform the engagement to obtain reasonable assurance about whether the Selected Information is free of material misstatement.

A reasonable assurance engagement includes examining, on a test basis, evidence supporting the amounts and disclosures within the Selected Information. The procedures selected depend on our judgment, including the assessment of the risks of material misstatement in the Selected Information due to omissions, misrepresentation and errors. In making those risk assessments, we consider internal control relevant to the entity's preparation and fair presentation of the Selected Information in order to design assurance procedures that are appropriate in the circumstances, but not for the purpose of expressing a conclusion on the effectiveness of the entity's internal control. A reasonable assurance engagement also includes assessing the evaluation criteria used and significant estimates made by management, as well as evaluating the overall presentation of the Selected Information.

The main elements of our work were:

- Obtaining an understanding of the management systems, processes, and controls used to generate, aggregate and report the data;
- Testing relevant controls, documents and records on a sample basis;
- Testing and re-calculating quantitative information related to the Selected Information on a sample basis: and
- Reviewing the consistency of the Selected Information with the related disclosures in the Annual Report to the Director.

We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our conclusion.

### **Inherent limitations**

Non-financial performance information is subject to more inherent limitations than financial information, given the characteristics of the Selected Information and the methods used for determining and calculating such information. Qualitative interpretations of relevance, materiality and the accuracy of data are subject to individual assumptions and judgements. Furthermore, the nature and methods used to



determine such information, as well the evaluation criteria and the precision thereof, may change over time. It is important to read our report in the context of evaluation criteria.

#### Conclusion

In our opinion, the Selected Information for the year ended December 31, 2015 presents fairly, in all material respects, in accordance with the evaluation criteria listed in Appendix A:

- 1. The location of collection facilities, and any changes in the number of collection facilities from the prior year in accordance with Section 8(2)(b) of the Recycling Regulation;
- The description of how recovered product was managed in accordance with the pollution prevention hierarchy in accordance with 8(2)(d) of the Recycling Regulation;
- 3. The description of the total amount of the producers' product collected for the year ended December 31, 2015 in accordance with 8(2)(e) of the Recycling Regulation; and
- 4. The performance for the year in relation to targets in the approved stewardship plan under Sections 8(2)(b), (d), and (e) in accordance with Section 8(2)(g) of the Recycling Regulation.

## **Emphasis of matter**

Without qualifying our opinion, we draw your attention to Appendix B which describes why certain items required by the Assurance Requirements have been excluded. Our opinion is not qualified in respect of this matter.

#### Other matters

Our report has been prepared solely for the purposes of CBA's compliance with the reporting requirements relating to Sections 8(2)(b), (d), (e) and (g) of the Recycling Regulation and is not intended to be and should not be used for any other purpose. Our duties in relation to this report are owed solely to CBA, and accordingly, we do not accept any responsibility for loss occasioned to any other party acting or refraining from acting based on this report.

Our opinion does not constitute a legal determination on CBA's compliance with the Recycling Regulation.

CBA is responsible for their website and we do not accept responsibility for any changes that may have occurred to the reported subject matter information or criteria since they were initially presented on the website.

PricewaterhouseCoopers LLP

**Chartered Professional Accountants** 

Pricewaterhouse Coopers LLP

June 29, 2016



## Appendix A to the Independent Reasonable Assurance Report

Section 8 (2) (b) of the Recycling Regulation - the location of collection facilities, and any changes in the number and location of collection facilities from the previous report.

Three collection locations are located in Greater Vancouver Regional District. The fourth location is located in Ontario. There has been no change in the collection system or number of facilities used from the 2014 Annual Report.

Reference: Page 5 of the CBA 2015 Annual Report to the Director

### **Definitions:**

Collection Facility: Locations where refrigeration, dispensing and vending equipment are transferred to at
end of life by member companies and/or contracted distributors for evaluation and end-of-life management
processes, including preparation of units for transport to recycling processors.

### Evaluation criteria:

- Reporting Period: January 1st to December 31st annually.
- The number of collection facilities is obtained from the list of collection facilities as of December 31, 2015 maintained by management.
- The calculation of the number of collection facilities is performed by adding up the total number of collection facilities within the list of collection facilities.
- The changes in the number of collection facilities are tracked and a summary of changes is provided at the end of the year.
- The existence of the collection facilities is confirmed through verification testing of a sample of collection facilities and obtaining end of life management policies/procedures.



Section 8 (2) (d) of the Recycling Regulation - the description of how the recovered product was managed in accordance with the pollution prevention hierarchy

### Table 4: Estimated Product End Fate Data for year ended December 31, 2015

| Unit                              | Reused | Recycle | Energy<br>Recovery | Land Fill | Unknown |
|-----------------------------------|--------|---------|--------------------|-----------|---------|
| Vending<br>Machines               | 0%     | 82%     | 0%                 | 18%       | N/A     |
| Cooler Units                      | 0%     | 84%     | 0%                 | 16%       | N/A     |
| Beverage<br>Dispensing<br>Systems | ο%     | 75%     | ο%                 | 25%       | N/A     |

### Table 5: Processing Pathways for EOL Management

The basis of evidence for product treatment is derived from the Baseline Study Report submitted to the British Columbia Ministry of Environment in 2013 and prepared by the sustainability consultancy firm, Reclay StewardEdge.

| Unit                        | Nature of Processing   |  |
|-----------------------------|--|--|
|                             | Phase#1 - Transfer to<br>Intermediary Processor in<br>British Columbia | Phase#2 - Transfer to direct<br>processor in British Columbia<br>or elsewhere in North America |
| Vending Machines            | 100% of unit components  | ~82% of unit components recycled (mixed metal)   |
| Cooler Units                | 100% of unit components  | ~84% of unit components recycled (mixed metal)   |
| Beverage Dispensing Systems | 100% of unit components  | ~75% of units components recycled (mixed metal)  |

### **Definitions:**

- **Pollution Prevention Hierarchy:** Hierarchy in descending order of preference, such that pollution prevention is not undertaken at one level unless or until all feasible opportunities for pollution prevention at a higher level have been taken.
- **Product End Fate:** Units sent for end of life management
- **Recycle:** The element of the unit that can be recycled.
- Landfill: The waste element of the unit that cannot be recycled is send to the landfill.

## **Evaluation Criteria**

- Reporting Period: January 1st to December 31st annually.
- The use of a sustainability consultancy firm, Reclay StewardEdge, for the basis of the estimated product end fate data has been evaluated for the appropriateness of the work of management's expert as evidence.
- The estimated product end fate data for recycled and landfill is determined based on the estimated recycled amount of scrap metal from a unit.
- The number of units recycled is determined based on shipping documentation supporting units sent to recycling processor.



Section 8 (2) (e) of the Recycling Regulation - the description of the total amounts of the producer's product sold and collected and, if applicable, the producers' recovery rate.

In 2015, the total number of products collected was 6,923.

Reference: Page 9 of the CBA 2015 Annual Report to the Director

#### Note:

Recovery rate has been excluded as it is not applicable (see page ten of the Annual Report). Assurance is not required for product sold data if the stewardship program does not report a recovery rate, as defined in the Regulation, in accordance with the approved stewardship plan.

### **Definitions:**

- Recovery Rate: A calculated value derived from dividing total units collected by total units sold and measured as a percentage rounded to the first decimal point.
- **Product Sold:** Number of units distributed into the province as new units installed in-trade or refurbished/retrofitted units re-installed in-trade
- **Product Collected:** Number of units collected for refurbishment/retrofit, for end of life management or sold to third parties by the beverage companies.
- Beverage Units: Coolers, vending machines, and beverage dispensing systems which exhibit branding or
  are owned outright by the beverage company.
- **Beverage Company:** Producers as defined in Schedule 1 of the Recycling Regulation that are members of the Canadian Beverage Association.

#### **Evaluation Criteria**

- Reporting Period: January 1st to December 31st annually.
- The number of units collected is determined based on shipping documentation supporting units have been collected from their location.
- 305 of the 6,923 units collected were based on self-reporting by one CBA member.
- The self-reported product collected units reconcile to the numbers published in the annual report.



Section 8 (2) (g) of the Recycling Regulation - the performance for the year in relation to targets in the approved stewardship plan under Sections 8(2)(b), (d), and (e).

Collection Rate: 94.01%

Reference: Page 4 of the CBA 2015 Annual Report to the Director

## Definitions:

- **Collection Rate:** A calculated value derived from dividing total units collected by total units removed from tracking system and measured as a percentage rounded to two decimal points.
- **Unit Collected:** Number of units collected for refurbishment/retrofit, for end of life management or sold to third parties by the beverage companies.
- Units Removed From Tracking System: Number of units collected plus units lost in trade and other adjustments.

### **Evaluation Criteria**

- Reporting Period: January 1st to December 31st annually.
- The list of performance targets is obtained from approved stewardship plan.
- The completeness of the list of performance targets has been confirmed through review of the stewardship
  plan and Annual Report. CBA do not have any targets in their stewardship plan, but the collection rate has
  been agreed with the Ministry.
- The calculation for collection rate has been re-performed and compared to the target collection rate.



## **Appendix B to the Independent Reasonable Assurance Report**

CBA has not reported the recovery rate for the year in accordance with 8(2)(e) of the Recycling Regulations for the year ended December 31, 2015 as the approved stewardship plan does not outline the requirement to reporting recovery rates. If the stewardship program does not report a recovery rate in the approved plan, assurance for producers' product sold data is not required.